**Creative Systems**

Bernstein, P.L. 1998. Against the Gods: The Remarkable Story of Risk. John Wiley & Sons, New York, NY.

Campbell, J. 1988. Myths to Live by. Viking Penguin Inc., New York, NY.

Campbell, J. and B. Moyers. 1988. The Power of Myth. Doubleday, New York, NY.

Capra, F. 1982. The Turning Point. Bantam Books, New York, NY.

Capra, F. 1991. The Tao of Physics. Shambhala, Boston, MA.

Capra, F. 1996. The Web of Life. Anchor Books. Doubleday, New York, NY.

Chase, A. 2001. In a Dark Wood. Transaction Publ. New Brunswick, NJ.

Crichton. M. 2004. State of Fear. HarperCollins. New York, NY.

Dalai Lama. 1999. Ethics for the New Millennium. Penguin Putman. New York, NY.

Dalai Lama. 1998. The Art of Happiness. Riverhead Books. New York, NY.

Doidge, N. 2007. The Brain that Changes Itself: Stories of Personal Triumph from the Frontiers of Brain Science. Penguin Books. New York, NY.

Flannery, T. 2001. The Eternal Frontier: An Ecological History of North America and its Peoples. Atlantic Monthly Press, New York, NY.

Garcia, J. 1981. Tilting at the paper mills of academe. Am. Psych. 36:149-158.

Gibran, K. 1992. The Prophet. Alfred A. Knopf, New York, NY.

Gladwell, M. 2005. Blink: The Power of Thinking without Thinking. Little, Brown and Company. New York, NY.

Goswami, A. 2004. The Quantum Doctor: A Physicist’s Guide to Health and Healing. Hampton Roads. Charlottesberg, VA.

Gould, S.J. 1996. Full House: The Spread of Excellence from Plato to Darwin. Three Rivers Press, New York, NY.

Greene, B. 1999. The Elegant Universe. Vintage Books, New York, NY.

Gunderson, L.H., C.S. Holling, S.S. Light (Eds.). Barriers & Bridges to the Renewal of Ecosystems and Institutions. Columbia Univ. Press, NY.

Hawkins, D.R. 2002. Power vs. Force: The Hidden Determinants of Human Behavior. Hay House, Inc. Carlsbad, CA.

Hollick, M. 1993. Self-organizing systems and environmental management. Environmental Management 17:621-628.

Holling, C.S. 1995. What Barriers? What Bridges? Pages 3-34 in L.H. Gunderson, C.S. Holling, S.S. Light (eds.) Barriers & Bridges to the Renewal of Ecosystems and Institutions. Columbia Univ. Press, NY.

Jackson, P. 1995. Sacred Hoops. Hyperion, New York, NY.

Jantash, E. 1980. The Self-Organizing Universe. Pergamon Press, Oxford.

Kauffman, S.A. 1995. At Home in the Universe: A Search for the Laws of Self-Organization and Complexity. Oxford University Press, New York, NY.

Kauffman, S.A. 2000. Investigations. Oxford University Press, New York, NY.

Lancia, R.A., C.E. Braun, M.W. Collopy, R.D. Dueser, J.G. Kie, C.J. Martinka, J.D. Nichols, T.D. Nudds, W.R. Porath and N.G. Tilghman. 1996. ARM! For the future: adaptive resource management in the wildlife profession. Wildl. Soc. Bull. 24:436-442.

LeShan, L. 1974. How to Meditate. Bantam Books, New York, NY.

Lindley, D. 2008. Uncertainty: Einstein, Heisenberg, Bohr, and the Struggle for the Soul of Science. Random House, Inc. New York, NY.

Lipton, B. 2005. The Biology of Belief: Unleashing the Power of Consciousness, Matter & Miracles. Mountain of Love/Elite Books. Santa Rosa, CA.

Lomborg, B. 2001. The Skeptical Environmentalist: Measuring the Real State of the World. Cambridge Univ. Press, Cambridge, UK.

Neihardt, J. G. 1932. Black Elk Speaks. Washington Square Press, New York, NY.

Oikos. 1988. Forum on Holism and Reductionism. 53:267-288.

Pielou, E.C. 1991. After the Ice Age: The Return of Life to Glaciated North America. The University of Chicago Press. Chicago, IL.

Platt, J.R. 1964. Strong inference. Science 146:347-353.

Prigogine, I. and I. Stengers. 1984. Order out of chaos. Bantam, New York, NY.

Provenza, F.D. 1991. Viewpoint: Range science and range management are distinct but complementary endeavors. J. Range Manage. 44:181-183.

Provenza, F.D. 2000. Science, myth, and the management of natural resources. Rangelands 22:33-36.

Provenza, F.D., J.J. Villalba, C.D. Cheney and S.J. Werner. 1998. Self-organization of behavior: from simplicity to complexity without goals. Nutr. Res. Rev. 11:199-222.

Provenza, F.D., J.J. Villalba and M. Augner. 2000. The physics of foraging. Volume III, Pages 99-107 in J.G. Buchanan-Smith, L.D Bailey and P. McCaughey (eds.) Proceedings of the XVIII International Grassland Congress. Extension Service, Saskatchewan Agriculture & Food. Saskatoon, Saskatchewan.

Provenza, F., H. Pringle, D. Revell, N. Bray, C. Hines, R. Teague, T. Steffens and M. Barnes. 2013. Complex Creative Systems: Principles, Processes, and Practices of Transformation. Rangelands 35:6-13.

Rinpoche, Y.M. 2007. The Joy of Living: Unlocking the Secret & Science of Happiness. Random House, Inc. New York, NY.

Romesburg, H.C. 1981. Wildlife science: gaining reliable knowledge. J. Wildl. Manage. 45:293-313.

Romesburg, H.C. 1985. Wildlife science: gaining reliable knowledge. Rangelands 7:249-255.

Senge, P.M. 1990. The leader's new work: building learning organizations. Sloan Management Review. Fall: 7-23.

Senge, P.M. 1994. The Fifth Discipline - The Art and Practice of the Learning Organization. Currency Doubleday, New York, NY.

Taleb, N.N. 2001. Fooled by Randomness: The Hidden Role of Chance in the Markets and in Life. Texere. New York, NY.

Wheatley, M.J. 1994. Leadership and the New Science: Learning about Organization from an Orderly Universe. Berrett-Koehler Inc., San Francisco, CA.

Wilber, K. 1999. The Marriage of Sense and Soul: Integrating Science and Religion. Broadway Books, New York, NY.

**Plant Behavior**

***Evolutionary Considerations***

Boege, K. and R.J. Marquis. 2004. Facing herbivory as you grow up: the ontogeny of resistance in plants. TREE 20:441-448.

Bryant, J.P., P.J. Kuropat, S.M. Cooper, K. Frisby and N. Owen-Smith. 1989. Resource availability hypothesis of plant antiherbivore defense tested in a South African savanna ecosystem. Nature 340:227-229.

Bryant, J.P., J. Tahvanainen, M. Sulkinoja, R. Julkunen-Titto, P.B. Reichardt and T. Green. 1989. Biogeographic evidence for the evolution of chemical defense by boreal birch and willow against mammalian browsing. Am. Nat. 134:20-34.

Cheeke, P.R. 1998. Natural Toxicants in Feeds, Forages, and Poisonous Plants. Interstate Publ. Inc., Danville.

Coley, P.D., J.P. Bryant and F.S. Chapin III. 1985. Resource availability and plant antiherbivore defense. Science 230:895-899.

Ehrlich, P.R, and P.H. Raven. 1964. Butterflies and plants: a study in coevolution. Evolution 18:586-608.

Fox, L. 1981. Defense and dynamics in plant-herbivore systems. Am. Zool. 29:853-864.

Gershenzon, J. 1994. The cost of plant chemical defense against herbivory: A biochemical perspective. Pages 105-173 in E.A. Berneys (ed.), Insect-Plant Interactions. Vol. V. CRC Press, Boca Raton, FL.

Hay, M.E. and P.D. Steinberg. 1992. The chemical ecology of plant-herbivore interactions in marine versus terrestrial communities. Pages 371-413 in G.A. Rosenthal and M. R. Berenbaum (eds.), Herbivores: Their Interactions with Secondary Plant Metabolites. Second Ed. Academic Press, New York, NY.

Herms, D.A. and W.J. Mattson. 1992. The dilemma of plants: To grow or defend. Quart. Rev. Biol.67: 283-335.

Mack, R.N. and J.N. Thompson. 1982. Evolution in steppe with few large, hooved mammals. Am. Nat. 119:757-773.

McKey, D. 1979. The distribution of secondary compounds within plants. Pages 56-133 in G.A. Rosenthal and D.H. Janzen (eds.) Herbivores: Their Interaction with Secondary Plant Metabolites. Academic Press, NY.

Rhoades, D.F. 1979. Evolution of plant chemical defense against herbivores. Pages 3-54 in G.A. Rosenthal and D.H. Janzen (eds.) Herbivores: Their Interaction with Secondary Plant Metabolites. Academic Press, NY.

Whitham, T.G., W.P. Young, G.D. Martinsen, C.A. Gehring, J.A. Schweitzer, S.M. Shuster, G.M. Wimp, D.G. Fischer, J.K. Bailey, R.L. Lindroth, S. Woolbright and C.R. Kuske. 2003. Community and ecosystem genetics: A consequence of the extended phenotype. Ecology 84:559-573.

***Tolerance - Compensation***

McNaughton, S.J. 1983. Compensatory plant growth as a response to herbivory. Oikos 40:329-336.

Belsky, A.J. 1986. Does herbivory benefit plants? A review of the evidence. Am. Nat. 127:870-892.

Bergelson, J. and M.J. Crawley. 1992. Herbivory and *Ipomopsis aggregata*: the disadvantages of being eaten. Am. Nat. 139:870-882.

McNaughton, S.J. 1986. On plants and herbivores. Am. Nat. 128:765-770.

Belsky, A.J.1987. The effects of grazing: confounding of ecosystem, community, and organism scales. Am. Nat. 129:777-783.

Paige, K.N. and T.G. Whitham. 1987. Overcompensation in response to mammalian herbivory: the advantage of being eaten. Am. Nat. 129:407-416.

Forum. 1993. Grazing theory and rangeland management. Ecol. Appl. 3:1-38.

***Tolerance - Mechanisms***

Bilbrough, C.J. and J.H. Richards. 1993. Growth of sagebrush and bitterbrush following simulated winter browsing: Mechanisms and tolerance. Ecology 74:481-492.

Briske, D.D. 1991. Developmental morphology and physiology of grasses. Pages 85-108 in R.K. Heitschmidt and J.W. Stuth (eds.), Grazing Management. Timber Press, Portland.

Briske, D.D. and J.H. Richards. 1995. Plant responses to defoliation: A physiological, morphological and demographic evaluation. Pages 635-710 in D.J. Bedunah and R.E. Sosebee (eds.) Wildland Plants: Physiological Ecology and Developmental Morphology. Soc. Range Manage.

Caldwell, M.M. 1984. Plant requirements for prudent grazing. pp 117-152 in Developing Strategies for Rangeland Management. Westview, Boulder.

Caldwell, M.M., J.H. Richards, D.A. Johnson, R.S. Nowak, and R.S. Dzurec. 1981. Coping with herbivory: Photosynthetic capacity and resource allocation in two semiarid *Agropyron* bunchgrasses. Oecologia 50:14-24.

Dahl, B.E. 1995. Developmental morphology of plants. Pp 22-58 in D.J. Bedunah and R.E. Sosebee (eds.) Wildland Plants: Physiological Ecology and Developmental Morphology. Soc. Range Manage.

Forum. 1993. Grazing Theory and Rangeland Management. Ecol. Appl. 3:1-38.

Richards, J.H., and M.M. Caldwell. 1985. Soluble carbohydrates, concurrent photosynthesis and efficiency in regrowth following defoliation: a field study with *Agropyron* species. J. Appl. Ecol. 22:907-920.

***Avoidance - Mechanisms***

Baldwin, I.T. 1991. Damage-induced alkaloids in wild tobacco. Pages 47-69 in M.J. Raupp and D.W. Tallamy (eds.), Phytochemical Induction by Herbivores. John Wiley & Sons Inc., New York, NY.

Baldwin, I.T. and M.J. Karb. 1995. Plasticity in allocation of nicotine to reproductive parts in *Nicotiana attenuata*. J. Chem. Ecol. 21:897-909.

Bryant, J.P., F.S. Chapin III and D.R. Kline. 1983. Carbon/nutrient balance of boreal plants in relation to vertebrate herbivory. Oikos 40:357-368.

Bryant, J.P., K. Danell, F.D. Provenza, P.B. Reichardt, T.P. Clausen and R.A. Werner. 1991. Effects of mammal browsing on the chemistry of deciduous woody plants. Pages 135-154 in D.W. Tallamy and M.J. Raupp (eds.), Phytochemical Induction by Herbivores. John Wiley & Sons Inc., New York, NY.

Gershenzon, J. 1984. Changes in the levels of plant secondary metabolites under water and nutrient stress. Rec. Adv. Phytochem. 18:273-320.

Hamilton, J.G., A.R. Zangerl, E.H. DeLucia and M.R. Berenbaum. 2001. The carbon-nutrient balance hypothesis: Its rise and fall. Ecology Letters 4:86-95.

Haukioja, E. 1990. Induction of defenses in trees. Ann. Rev. Entomol. 36:25-42.

Karban, R. and J.H. Myers. 1989. Induced plant responses to herbivory. Annu. Rev. Ecol. Syst. 20:331-348.

Myers, J.H. and D. Bazely. 1991. Thorns, spines, prickles, and hairs: Are they stimulated by herbivory and do they deter herbivores? Pages 325-344 in D.W. Tallamy and M.J. Raupp (eds.) Phytochemical Induction by Herbivores. John Wiley & Sons Inc., New York.

Redak, R.A. 1987. Forage quality: Secondary chemistry of grasses. Pages 38-55 in J.L. Capinera (ed.) Integrated Pest Management on Rangeland: A Shortgrass Prairie Perspective. Westview Press, Boulder, CO.

Reichardt, P.B., T.P. Clausen and J.P. Bryant. 1987. Plant secondary metabolites as feeding deterrents to vertebrate herbivores. Pages 37-42 in F.D. Provenza, J.T. Flinders and E.D. McArthur (eds.) Proc. -- Symp. on plant-herbivore interactions. USDA For. Serv. Intermtn. Res. Sta. Gen. Tech. Rep. INT-222.

Reichardt, P.B., F.S. Chapin III, J.P. Bryant, B.R. Mattes and T.P. Clausen. 1991. Carbon/nutrient balance as a predictor of plant defense in Alaskan balsam poplar: Potential importance of metabolic turnover. Oecologia 88:401-406.

Tallamy, D.W. and M.J. Raupp (eds.). 1991. Phytochemical Induction by Herbivores. John Wiley & Sons Inc., New York.

Toumi, J., P. Niemela and S. Siren. 1990. The Panglossian paradigm and delayed inducible accumulation of foliar phenolics in mountain birch. Oikos 59:399-410.

Vicari, M. And D.R. Bazely. 1993. Do grasses fight back? The case for antiherbivore defenses. TREE 8:137-141.

Waterman, P.G. and S. Mole. 1989. Extrinsic factors influencing production of secondary metabolites in plants. Pages 107-134 in E.A. Bernays (Ed.) Insect-Plant Interactions, Vol. 1. CRC Press, Boca Raton, FL.

***Ecological Considerations***

Bryant, J.P., F.D. Provenza, J. Pastor, P.B. Reichardt, T.P. Clausen, and J.T. DuToit. 1991. Interactions between woody plants and browsing mammals mediated by secondary metabolites. Annu. Rev. Ecol. Syst. 22:431-446.

Burkhardt, J.W. 1996. Herbivory in the Intermountain West. Idaho Forest, Wildlife and Range Experiment Station Bulletin 58. Moscow, Idaho.

Hay, M.E. and W. Fenical. 1988. Marine plant-herbivore interactions: The ecology of chemical defense. Ann. Rev. Ecol. Syst. 19:111-145.

Hobbs, N.T. 1996. Modification of ecosystems by ungulates. J. Wildl. Manage. 60: 695-713.

Huntley, N. 1991. Herbivores and the dynamics of communities and ecosystems. Annu. Rev. Ecol. Syst. 22:477-503.

Krebs, C.J., S. Boutin, and R. Boonstra. (eds.) 2001. Ecosystem Dynamics of the Boreal Forest: The Kluane Project. Oxford Univ. Press, NY.

Milchunas, D.G., O. Sala, and W.K. Lauenroth. 1988. A generalized model on the effects of grazing by large herbivores on grassland community structure. Am. Nat 132:87-106.

Milchunas, D.G. and I. Noy-Meir. 2002. Grazing refuges, external avoidance of herbivory and plant diversity. Oikos 99:113-130.

Pastor, J. and Y. Cohen. 1997. Herbivores, the functional diversity of plant species, and the cycling of nutrients in ecosystems. Theor. Popul. Biol. 51:165-179.

Pastor, J., R. Moen and Y. Cohen. 1997. Spatial heterogeneities, carrying capacity, and feedbacks in animal-landscape interactions. J. Mammalogy. 78:1040-1052.

Provenza, F.D., J.J. Villalba and J.P. Bryant. 2003. Foraging by herbivores: Linking the biochemical diversity of plants with herbivore culture and landscape diversity. Pages 387-421 in J.A. Bissonette and I. Storch (eds.) Landscape Ecology and Resource Management: Linking Theory with Practice. Island Press, NY.

Teague, R., F. Provenza, U. Kreuter, T. Steffens, M. Barnes. 2013. Multi-paddock grazing on rangelands: Why the perceptual dichotomy between research results and rancher experience? J. Environ. Manage. 128:699-717.

Vourc'h, G., J.L. Martin, P. Duncan, J. Escarre and T.P. Clausen. 2001. Defensive adaptations of *Thuja plicata* to ungulate browsing: a comparative study between mainland and island populations. Oecologia 126:84-93.

**Models of Foraging**

***Behavior by Consequences***

Chance, P. 1988. Learning and Behavior. Wadsworth, Inc., Belmont.

Freeman, W.J. 1991. The physiology of perception. Sci. Am. February:78-85.

Latham, G. 1994. Power of positive parenting. Utah State Univ. Logan, UT.

Latham, G.I. 1995. The making of a stable family. In Handbook of Psychology and the Human Condition. Plenum Publishing Co., New York.

Maturana, H.R. and F.J. Varela. 1980. Autopoiesis and cognition. Dordrecht, Boston, MA.

Mazur, J.E. 1990. Learning and Behavior. Prentice Hall, Englewood Cliffs, NJ.

Moore, D.S. 2002. The Dependent Gene: The Fallacy of “Nature vs. Nurture.” Henry Holt and Company, New York, NY.

Pavlov, I.P. 1927. Conditioned Reflexes. Oxford Univ. Press, London.

Petri, H.L. and M. Mishkin. 1994. Behaviorism, cognitivism and the neuropsychology of memory. Am. Sci. 82:30-37.

Prior, K. 1985. Don’t shoot the dog! Bantam Books, New York, NY.

Provenza, F.D. 1991. Behavior and nutrition are complementary endeavors. Pages 157-169 in Proceedings 2nd Grazing Livestock Nutrition Conference. Agric. Expt. Sta. MP-133. Oklahoma State Univ.

Sacks, O. 1985. The Man who Mistook His Wife for a Hat. Harper Collins, New York, NY.

Shouse, D. 1995. The sound of two hands clapping. Newsweek. May 1.

Skinner, B.F. 1981. Selection by consequences. Science 213:501-504.

Strohman, R.C. The coming Kuhnian revolution in biology. Nature Biotech. 15:194-200.

Trut, L.N. 1999. Early canid domestication: the farm-fox experiment. American Scientist 87:160-169.

***Ecological Relationships***

Belovsky, G. and O.J. Schmitz. 1991. Mammalian herbivore foraging and the role of plant defenses. Pages 1-28 in: R.T. Palo and C.T. Robbins (eds.) Plant Defenses Against Mammalian Herbivory. CRC Press, Boca Raton, FL.

Belovsky, G. and O.J. Schmitz. 1993. Owen-Smith's evaluation of herbivore foraging models: what is constraining? Evol. Ecol. 7:525-529.

Belovsky, G.E., J. Fryxell, and O.J. Schmitz. 1999. Natural selection and herbivore nutrition: optimal foraging theory and what it tells us about the structure of ecological communities. Pages 1-70 in Jung, H.G., and G.C. Fahey, Jr. (eds.), Nutritional Ecology of Herbivores - Proceedings of the Vth International Symposium on the Nutrition of Herbivores. Am. Soc. Anim. Sci. Savoy, IL.

Demment, M. W. and P. J. Van Soest. 1985. A nutritional explanation for body-size patterns of ruminant and nonruminant herbivores. Am. Nat. 125:641-672.

Dufty, A.M. Jr., Clobert, J. and Moller, A.P. 2002. Hormones, developmental plasticity and adaptation. TREE 17:190-196.

Gordon, I.J. and A.W. Illius. 1994. The functional significance of the browser-grazer dichotomy in African ruminants. Oecologia 98:167-175.

Gregorini, P., Villalba, J.J., Provenza, F.D., Beukes, P.C., & Forbes, J.M. 2015. Modelling preference and diet selection patterns by grazing ruminants. Animal Production Science. 55:360–375.

Hanley, T.A. 1982. The nutritional basis for food selection by ungulates. J. Range Manage. 35:146-151.

Hanley, T.A. 1997. A nutritional view of understanding and complexity in the problem of diet selection by deer (Cervidae). Oikos 79:209-218.

Hill D.L and C.M. Mistretta. 1990. Developmental neurobiology of salt taste sensation. TINS 13:188-195.

Hofmann, R.R. 1988. Anatomy of the gastrointestinal tract. Pages 14-43 in Church, D.C. (ed.) The ruminant animal. Prentice Hall, Englewood Cliffs.

Illius, A.W., I.J. Gordon, D.A. Elston and J.D. Milne. 1999. Diet selection in goats: a test of intake-rate maximization. Ecology 80:1008-1018.

Kennedy, M. and R.D. Gray. 1993. Can ecological theory predict the distribution of foraging animals? A critical analysis of experiments on the Ideal Free Distribution. Oikos 68:158-166.

Langvatn, R. and T.A. Hanley. 1993. Feeding-patch choice by red deer in relation to foraging efficiency. Oecologia 95:164-170.

Owen-Smith, N. 1993. Evaluating optimal diet models for and African browsing ruminant, the kudu: how constraining are the assumed constraints? Evol. Ecol. 7:499-524.

Piersma, T., and A. Lindstrom. 1997. Rapid reversible changes in organ size as a component of adaptive behaviour. TREE 12:134-138.

Provenza, F.D. and D.F. Balph. 1990. Applicability of five diet-selection models to various foraging challenges ruminants encounters. Pages 423-459 in: R.N. Hughes (ed.) Behavioural Mechanisms of Food Selection. NATO ASI Series G: Ecological Sciences, Vol. 20. Springer-Verlag, Berlin, Heildelberg.

Robbins, C.T., D.E. Spalinger and W. van Hoven. 1995. Adaptation of ruminants to browse and grass diets: are anatomical-based browser-grazer interpretations valid? Oecologia 103:208-213.

Schlichting, C.D., and M. Pigliucci. 1998. Phenotypic Evolution: A Reaction Norm Perspective. Sinauer Publications, Sinauer, MA.

Senft, R.L., M.B. Coughenour, D.W. Bailey, L.R. Rittenhouse, O.E. Sala and D.M. Swift. 1987. Large herbivore foraging and ecological hierarchies. Bioscience 37:789-799.

Spalinger, D.E., S.M. Cooper, D.J. Martin and L.A. Shipley. 1977. Is social learning an important influence on foraging behavior in white-tailed deer? J. Wildl. Manage. 61:611-621.

Stamps, J. 2001. Habitat selection by dispersers: proximate and ultimate approaches. Pages 230-242 in Clobert, J., E. Danchin, A. Dhondt, and J. Nichols (eds.), Dispersal. Oxford Univ. Press.

Stephens, D.W. and J.R. Krebs. 1986. Foraging Theory. Princeton Univ. Press, Princeton, NJ.

Sutherland, W.J. 1996. From Individual Behaviour to Population Ecology. Oxford Univ. Press, New York, NY.

Tolkamp, B.J. and J.J.M.H. Ketelaars. 1992. Toward a new theory of intake regulation in ruminants 2. Costs and benefits of feed consumption: an optimization approach. Livestock Prod. Sci. 30:297-317.

Wilmshurst, J.F., J.M. Fryxell and R.J. Hudson. 1995. Forage quality and patch choice by wapiti (*Cervus elaphus*). Behav. Ecol. 6:209-217.

Wilmshurst, J.F. and J.M. Fryxell. 1995. Patch selection by red deer in relation to energy and protein intake: a re-evaluation of Langvatn and Hanley’s (1993) results. Oecologia 104:297-300.

**Flavor-Feedback**

Aldrich, C.G., M.T. Rhodes, J.L. Miner, M.S. Kerley, and J.A. Paterson. 1993. The effects of endophyte-infected tall fescue consumption and use of a dopamine antagonist on intake, digestibility, body temperature, and blood constituents in sheep. J. Anim. Sci. 71:158-163.

Andelt, W.F., D.L. Baker and K.P. Burnham. 1992. Relative preference of captive cow elk for repellent-treated diets. J. Wildl. Manage. 56:164-173.

Anil, M.H. and J.M. Forbes. 1980. Feeding in sheep during intraportal infusions of short-chain fatty acids and the effect of liver denervation. J. Physiol. 298:407-414.

Anil, M.H. and J.M. Forbes. 1988. The roles of hepatic nerves in the reduction of food intake as a consequence of intraportal sodium propionate administration in sheep. Quart. J. Exptl. Physiol. 73:539-546.

Banner, R.E., J. Rogosic, E.A. Burritt and F.D. Provenza. 2000. Supplemental barley and activated charcoal increase intake of sagebrush (*Artemisia tridentata* ssp.) by lambs. J. Range Manage. 53:415-420.

Bernays, E.A. and M.S. Singer. 2005. Taste alteration and endoparasites. Nature 436:476.

Berteaux, D., M. Crete, J. Huot, J. Maltais and J.-P. Ouellet. 1998. Food choice by white-tailed deer in relation to protein and energy content of the diet: a field experiment. Oecologia 115:84-92.

Black, J.L. and P.A. Kenney. 1984. Factors affecting diet selection by sheep. II. Height and density of pasture. Aust. J. Agric. Res. 35:565-578.

Booth, D.A. and A.M. Toase. 1983. Conditioning of hunger/satiety signals as well as flavour cues in dieters. Appetite 4:235-236.

Burritt, E.A. and F.D. Provenza. 1989. Food aversion learning: ability of lambs to distinguish safe from harmful foods. J. Anim. Sci. 67:1732-1739.

Burritt, E.A. and F.D. Provenza. 1991. Ability of lambs to learn with a delay between food ingestion and consequences given meals containing novel and familiar foods. Appl. Anim. Behav. Sci. 32:179-189.

Burritt, E.A. and F.D. Provenza. 1992. Lambs form preferences for non-nutritive flavors paired with glucose. J. Anim. Sci. 70:1133-1136.

Burritt, E.A. and F.D. Provenza. 1997. Effect of an unfamiliar location on the consumption of novel and familiar foods by sheep. Appl. Anim. Behav. Sci. 54:317-325.

Cairns, M.C., J.J. Cooper, H.P.B. Davidson and D.S. Mills. 2002. Association in horses of orosensory characteristics of foods with their post-ingestive consequences. Anim. Sci. 75:257-265.

Cibils, A.F, L.D. Howery and G.B. Ruyle. 2004. Diet and habitat selection by cattle: the relationship between skin- and gut-defense systems. Appl. Anim. Behav. Sci. 88:187-208.

Cooper, S.D.B., I. Kyriazakis, D.H. Anderson and J.D. Oldham. 1993. The effect of physiological state (Late pregnancy) on the diet selection of ewes. Anim. Prod. 56:469A.

Critchley, H.D. and Rolls, E.T. 1996. Hunger and satiety modify the responses of olfactory and visual neurons in the primate orbitofrontal cortex. J. Neurophysiol. 75:1673-1686.

Damasio, A.R. 1994. Descartes' Error: Emotion, Reason, and the Human Brain. Avon Books, New York.

Denton, M. 1985. Evolution: A Theory in Crisis. Adler and Adler, Bethesda, MD.

duToit, J.T., F.D. Provenza and A.S. Nastis. 1991. Conditioned taste aversions: How sick must a ruminant get before it detects toxicity in foods? Appl. Anim. Behav. Sci. 30:35-46.

Dziba, L.E. and F.D. Provenza. 2007. Dietary monoterpene concentrations influence feeding patterns of lambs. Appl. Anim. Behav. Sci. 109:49-57.

Dziba L.E., J.O. Hall and F.D. Provenza. 2006. Feeding behavior of lambs in relation to kinetics of 1,8-cineole dosed intravenously or into the rumen. J. Chem. Ecol. 32: 391-408.

Dziba L.E., Provenza F.D., J.J. Villalba and S.B. Atwood. 2007. Supplemental energy and protein increase use of sagebrush by sheep. Small Rum. Res. 69:203-207.

Egan, A.R. 1977. Nutritional status and intake regulation in sheep. VIII. Relationships between the voluntary intake of herbage by sheep and the protein/energy ratio in the digestion products. Aust. J. Agric. Res. 28:907-915.

Egan, A.R. 1980. Host animal-rumen relationships. Proc. Nutr. Soc. 39:79-87.

Egan, A.R. and Q.R. Rogers. 1978. Effects of amino acid imbalance on roughage intake of ruminant lambs. Aust. J. Agric. Res. 29:1263-1279.

Fisher, D.S., J.C. Burns and H.F. Mayland. 1997. Variation in preference for morning or afternoon harvested hay in sheep, goats, and cattle. J. Anim. Sci. 75 (Suppl.), 201.

Fisher, D.S., H.F. Mayland and J.C. Burns. 1997. Diurnal timing of hay harvest and ruminant preferences for hays. Agronomy Abstracts p. 142.

Fisher, D.S., H.F. Mayland and J.C. Burns. 1999. Variation in ruminants' preferences for tall fescue hays cut either at sundown or at sunup. J. Anim. Sci. 77:762-768.

Forbes, J.M. and F.D. Provenza. 2000. Integration of learning and metabolic signals into a theory of dietary choice and food intake. Pages 3-19 in P. Cronje (Ed.) Ruminant Physiology: Digestion, Metabolism, Growth and Reproduction. CAB International, Wallingford, Oxon.

Garcia, J. 1989. Food for Tolman: cognition and cathexis in concert. p. 45-85. *In*: Archer, T. and L. Nilsson (eds.), Aversion, Avoidance and Anxiety. Hillsdale, New Jersey.

Garcia, J. And R.A. Koelling. 1966. Relation of cue to consequence in avoidance learning. Psychon. Sci. 4:123-124.

Garcia, J., and R. Garcia y Robertson. 1985. Evolution of learning mechanisms, Pages 191-242 in B.L Hammonds (Ed.). The Master Lecture Series, Psychology and Learning. American Psychological Association, Washington, D.C.

Garcia, J., W.G. Hankins and K.W. Rusiniak. 1974. Behavioral regulation of the milieu interne in man and rat. Science 185:824-831.

Garcia, J. and M.D. Holder. 1985. Time, space and value. Human Neurobiol. 4:81-89.

Garcia, J. and R.A. Koelling. 1966. Relation of cue to consequence in avoidance learning. Psychonomic Sci. 4:123-124.

Garcia, J., P.A. Lasiter, F. Bermudez-Rattoni and D.A. Deems. 1985. A general theory of aversion learning. Pages 8-21 in Braveman N.S. and P. Bronstein (eds.), Experimental Assessments and Clinical Applications of Conditioned Food Aversions. New York Acad. Sci., New York, NY.

Ginane, C., Bonnet, M., Revell, D.K. 2015. Feeding behaviour is a consequence of interactions between a reward system and the regulation of metabolic homeostasis. Animal Production Science. 55:247-260.

Green, K.F. and J. Garcia. 1971. Recuperation from Illness: Flavor Enhancement for Rats. Science 173:749-751.

Kalat, J.W. 1974. Taste salience depends on novelty, not concentration in taste-aversion learning in the rat. J. Comp. Physiol. Psych. 86:47-50.

Kyriazakis, I. and J.D. Oldham. 1993. Diet selection in sheep: The ability of growing lambs to select a diet that meets their crude protein (nitrogen x 6.25) requirements. Br. J. Nutr. 69:617-629.

Kyriazakis, I. and J.D. Oldham. 1997. Food intake and diet selection of sheep: the effect of manipulating the rates of digestion of carbohydrates and protein of the foods on offer. Br. J. Nutr. 77:243-254.

Kyriazakis, I., J.D. Oldham, R.L. Coop and F. Jackson. 1994. The effect of subclinical intestinal nematode infection on the diet selection of growing sheep. Br. J. Nutr. 72:665-677.

Launchbaugh, K.L. and F.D. Provenza. 1993. Can plants practice mimicry to avoid grazing by mammalian herbivores? Oikos 66:501-504.

Launchbaugh, K.L., F.D. Provenza and E.A. Burritt. 1993. How herbivores track variable environments: Response to variability of phytotoxins. J. Chem. Ecol. 19:1047-1056.

Launchbaugh, K.L., F.D. Provenza and M.J. Werkmeister. 1997. Overcoming food neophobia. Appl. Anim. Behav. Sci. 54:327-334.

Lawler, I.R., J. Stapley, W.J. Foley and B.M. Eschler. 1999. Ecological example of conditioned flavor aversion in plant-herbivore interactions: Effect of terpenes of *Eucalyptus* leaves on feeding by common ringtail and brushtail possums. J. Chem. Ecol. 25:401-415.

LeDoux, J.E. 1994. Emotion, memory and the brain. Scientific American 270:50-57.

LeDoux. J. 2002. Synaptic Self: How Our Brains Become Who We Are. Viking Penguin, NY.

Lett, B.T. 1985. The pain-like effect of gallamine and naloxone differs from sickness induced by lithium chloride. Behav. Neurosci. 99:145-150.

Martin, M. 1999. Killer in gourmet clothing. Colorado Outdoors. May-June:33.

McArthur, C., A.E. Hagerman and C.T. Robbins. 1991. Physiological strategies of mammalian herbivores against plant defenses. Pages 103-114 in R.T. Palo and C.T. Robins (eds) Plant Defenses Against Mammalian Herbivory. CRC Press, Boca Raton, FL.

Moore, B., Wiggins, N., Marsh, K., Dearing, D, & Foley, W. 2015. Translating physiological signals to behavioural changes in feeding behaviour in mammals and the future effect of global climate change. Animal Production Science. 55:272-283.

Perez, C., K. Ackroff and A. Sclafani. 1996. Carbohydrate- and protein-conditioned flavor preferences: effects of nutrient preloads. Phys. Behav. 59:467-474.

Phy, T.S., and F.D. Provenza. 1998. Sheep fed grain prefer foods and solutions that attenuate acidosis. J. Anim. Sci. 76:954-960.

Phy, T.S. and F.D. Provenza. 1998. Eating barley too frequently or in excess decreases lambs’ preference for barley but sodium bicarbonate and lasalocid attenuate the response. J. Anim. Sci. 76:1578-1583.

Provenza, F.D. 1995. Postingestive feedback as an elementary determinant of food preference and intake in ruminants. J. Range Manage. 48:2-17.

Provenza, F.D. 1995. Role of learning in food preferences of ruminants: Greenhalgh and Reid revisited. Pages 233-247 in W.V. Engelhardt, S. Leonhard-Marek, G. Breves, and D. Giesecke (eds.) Ruminant Physiology: Digestion, Metabolism, Growth and Reproduction. Proceedings of the Eighth International Symposium on Ruminant Physiology. Ferdinand Enke Verlag, Stuttgart.

Provenza, F.D. 1996. A functional explanation for palatability. Pages 123-125 in N.E. West (ed.) Proc. Fifth International Rangeland Congress. Vol. II. Soc. Range Manage. Denver, CO.

Provenza, F.D. 1997. Feeding behavior of animals in response to plant toxicants. Pages 231-242 in J.P.F. D'Mello (ed.) CRC Handbook of Plant and Fungal Toxicants. CRC Press Inc., Boca Raton.

Provenza, F.D. and J.J. Villalba. 2006. Foraging in Domestic Vertebrates: Linking the Internal and External Milieu. Pages 210-240 in Bels, V.L. (ed.) Feeding in Domestic Vertebrates: From Structure to Function. CABI Publ., Oxfordshire, UK.

Provenza, F.D., J.A. Pfister and C.D. Cheney. 1992. Mechanisms of learning in diet selection with reference to phytotoxicosis in herbivores. J. Range Manage. 45:36-45.

Provenza, F.D., J.J. Lynch and J.V. Nolan. 1993. The relative importance of mother and toxicosis in the selection of foods by lambs. J. Chem. Ecol. 19:313-323.

Provenza, F.D., J.J Lynch and J.V. Nolan. 1994. Food aversion conditioned in anesthetized sheep. Physiol. Behav. 55:429-432.

Provenza, F.D., J.J. Lynch, E.A. Burritt and C.B. Scott. 1994. How goats learn to distinguish between novel foods that differ in postingestive consequences. J. Chem. Ecol. 20:609-624.

Provenza, F.D., L. Ortega-Reyes, C.B. Scott, J.J. Lynch and E.A. Burritt. 1994. Antiemetic drugs attenuate food aversions in sheep. J. Anim. Sci. 72:1989-1994.

Provenza, F.D., J.J. Lynch and C.D. Cheney. 1995. Effects of a flavor and food restriction on the intake of novel foods by sheep. Appl. Anim. Behav. Sci. 43:83-93.

Provenza, F.D., J.J. Villalba, C.D. Cheney and S.J. Werner. 1998. Self-organization of foraging behavior: from simplicity to complexity without goals. Nutr. Res. Rev. 11:199-222.

Provenza, F.D., J.J. Villalba and M. Augner. 2000. The physics of foraging. Volume III, Pages 99-107 in J.G. Buchanan-Smith, L.D Bailey and P. McCaughey (eds.) Proceedings of the XVIII International Grassland Congress. Extension Service, Saskatchewan Agriculture & Food. Saskatoon, Saskatchewan.

Provenza, F.D., B.R. Kimball and J.J. Villalba. 2000. Roles of odor, taste, and toxicity in the food preferences of lambs. Oikos 88:424-432.

Provenza, F.D., E.A. Burritt, A. Perevolotsky and N. Silanikove. 2000. Self-regulation of intake of polyethylene glycol by sheep fed diets varying in tannin concentrations. J. Anim. Sci. 78:1206-1212.

Provenza, F.D., J.J. Villalba, J. Haskell, J.W. MacAdam, T.C. Griggs and R.D. Wiedmeier. 2006. The value to herbivores of plant physical and chemical diversity in time and space. Crop. Sci. In press.

Revusky, S.H. and E.W. Bedarf. 1967. Association of illness with prior ingestion of novel foods. Science 155:219-220.

Scott, L.L. and F.D. Provenza. 1999. Variation in food selection among lambs: effects of basal diet and foods offered in a meal. J. Anim. Sci. 77:2391-2397.

Scott, L.L. and F.D. Provenza. 2000. Lambs fed protein or energy imbalanced diets forage in locations and on foods that rectify imbalances. Appl. Anim. Behav. Sci. 68:293-305.

Scott, T.R. 1990. Gustatory control of food selection. Pages 243-263 In E.M. Stricker (ed.) Handbook of Behavioral Neurobiology Vol. 10. Plenum Press, New York.

Seynaeve, C., P.H.M. De Mulder and J. Verweij. 1991. Pathophysiology of cytotoxic drug-induced emesis: far from crystal-clear. Pharmacology Weekbald Scientific Edition 13:1-6.

Shaw, R.A., J.J. Villalba and F.D. Provenza. 2006. Resource availability and quality influence patterns of diet mixing by sheep. J. Chem. Ecol. 32:1267-1278.

Shaw, R.A., J.J. Villalba and F.D. Provenza. 2006. The influence of stocking density on diet mixing behavior of sheep grazing on a sagebrush steppe. Appl. Anim. Behav. Sci. 100:207-218.

Titus, C.H., F.D. Provenza, E.A. Burritt, A. Perevolotsky and N. Silanikove. 2000. Preferences for foods varying in macronutrients and tannins by lambs supplemented with polyethylene glycol. J. Anim. Sci. 78:1443-1449.

Titus, C.H., F.D. Provenza, A. Perevolotsky, N. Silanikove and J. Rogosic. 2001. Supplemental polyethylene glycol influences preferences of goats browsing blackbrush. J. Range. Manage 54:161-165.

Villalba, J.J. and F.D. Provenza. 1996. Preference for flavored wheat straw by lambs conditioned with intraruminal administrations of sodium propionate. J. Anim. Sci. 74:2362-2368.

Villalba, J.J. and F.D. Provenza. 1997. Preference for wheat straw by lambs conditioned with intraruminal infusions of starch. Br. J. Nutr. 77:287-297.

Villalba, J.J. and F.D. Provenza. 1997. Preference for flavoured foods by lambs conditioned with intraruminal administration of nitrogen. Br. J. Nutr. 78:545-561.

Villalba, J.J. and F.D. Provenza. 1997. Preference for flavored wheat straw by lambs conditioned with intraruminal infusions of acetate and propionate. J. Anim. Sci. 75:2905-2914.

Villalba, J.J. and F.D. Provenza. 1999. Nutrient-specific preferences by lambs conditioned with intraruminal infusions of starch, casein, and water. J. Anim. Sci. 77:378-387.

Villalba, J.J. and F.D. Provenza. 1999. Effects of food structure and nutritional quality and animal nutritional state on intake behaviour and food preferences of sheep. Appl. Anim. Behav. Sci. 63:145-163.

Villalba, J.J. and F.D. Provenza. 2000. Discriminating among novel foods: effects of energy provision on preferences of lambs for poor-quality foods. Appl. Anim. Behav. Sci. 66:87-106.

Villalba, J.J. and F.D. Provenza. 2000. Postingestive feedback from starch influences the ingestive behavior of sheep consuming wheat straw. Appl. Anim. Behav. Sci. 66:49-63.

Villalba, J.J. and F.D. Provenza. 2000. Roles of novelty, generalization and postingestive feedback in the recognition of foods by lambs. J. Anim. Sci. 78:3060-3069.

Villalba, J.J. and F.D. Provenza. 2000. Roles of flavor and reward intensities in acquisition and generalization of food preferences in lambs: Do strong plant signals always deter herbivory? J. Chem. Ecol. 26:1911-1922.

Villalba, J.J., and F.D. Provenza. 2001. Preference for polyethylene glycol by sheep fed quebracho tannin. J. Anim. Sci. 79:2066-2074.

Villalba, J.J. and F.D. Provenza. 2002. Polyethylene glycol influences selection of foraging location by sheep consuming quebracho tannin. J. Anim. Sci. 80:1846-1851.

Villalba, J.J., F.D. Provenza and J. Rogosic. 1999. Preference for flavored wheat straw by lambs conditioned with intraruminal infusions of starch administered at different times after straw ingestion. J. Anim. Sci. 77:3185-3190.

Villalba, J.J., F.D. Provenza, and R. Shaw. 2006. Sheep self-medicate with substances that ameliorate the negative effects of grain, tannins, and oxalates. Anim. Behav. 71:1131-1139.

Villalba, J.J., F.D., Provenza and R. Shaw. 2006. Initial conditions and temporal delays influence preference for foods high in tannins and for foraging locations with and without foods high in tannins by sheep. Appl. Anim. Behav. Sci. 97:190-205.

Villalba, J.J., F.D. Provenza, J.O. Hall and C. Peterson. 2006. Phosphorus appetite in sheep: Dissociating taste from postingestive effects. J. Anim. Sci. 84:2213-2223.

Villalba, J.J., F.D. Provenza and J.O. Hall. 2008. Learned appetites for calcium, phosphorus and sodium in sheep. J. Anim. Sci. 86:738-747.

Wang, J. and F.D. Provenza. 1996. Food preference and acceptance of novel foods by lambs depend on the composition of the basal diet. J. Anim. Sci. 74:2349-2354.

Wang, J. and F.D. Provenza. 1996. Food deprivation affects preference of sheep for foods varying in nutrients and a toxin. J. Chem. Ecol. 22:2011-2021.

Wang, J. and F.D. Provenza. 1997. Dynamics of preference by sheep offered foods varying in flavors, nutrients, and a toxin. J. Chem. Ecol. 23:275-288.

**Satiety-Variety**

Atwood, S.B., F.D. Provenza, R.D. Wiedmeier and R.E. Banner. 2001. Changes in preferences of gestating heifers fed untreated or ammoniated straw in different flavors. J. Anim. Sci. 79:3027-3033.

Atwood, S.B., F.D. Provenza, R.D. Wiedmeier and R.E. Banner. 2001. Influence of free-choice versus mixed-ration diets on food intake and performance of fattening calves. J. Anim. Sci.79:3034-3040.

Atwood, S.B., F.D. Provenza, J.J. Villalba and R.D. Wiedmeier. 2006. Intake of lambs offered ad libitum access to one of three iso-caloric and iso-nitrogenous mixed rations or a choice of all three foods. Livestock Sci. 101:142-149.

Austin, D.D. 2000. Managing livestock grazing for mule deer (*Odocoileus hemionus*) on winter range in the Great Basin. Western N. Am. Nat. 60:198-203.

Bailey, D.W. and F.D. Provenza. 2008. Mechanisms determining large-herbivore distribution. Pages 7-28 in H.T.T. Prins and F. van Langevelde (eds.) Resource Ecology: Spatial and Temporal Dynamics of Foraging. Springer. Dordrecht, Netherlands.

Banner, R.E., J. Rogosic, E.A. Burritt and F.D. Provenza. 2000. Supplemental barley and activated charcoal increase intake of sagebrush by lambs. J. Range Manage. 53:415-420.

Baraza, E., J.J. Villalba and F.D. Provenza. 2005. Nutritional context influences preferences of lambs for foods with plant secondary metabolites. Appl. Anim. Behav. Sci. 92:293-305.

Bayoumi, M.A. and A.D. Smith. 1976. Response of big game winter range to fertilization. J. Range Manage. 29:44-48.

Bazely, D.R. 1989. Carnivorous herbivores: Mineral nutrition and the balanced diet. Trends in Ecol. Evol. 4:155-156.

Beck, B.B., L.G. Rapaport, S. Price, M.R. Wilson and A.C. Wilson. 1994. Reintroduction of captive-born animals. Pages 265-286 in P.J. Olney, G.M. Mace and A.T. Feistner (eds.) Creative conservation: interactive management of wild and captive animals. Chapman and Hall, London.

Belovsky G.E. and O.J. Schmitz. 1991. Mammalian herbivore foraging and the role of plant defenses. Pages 1-28 in R.T. Palo and C. T. Robbins (eds.) Plant Defenses Against Mammalian Herbivory. CRC Press, Boca Raton, FL.

Belovsky, G.E. and O.J. Schmitz. 1994. Plant defenses and optimal foraging by mammalian herbivores. J. Mammal. 75:816-832.

Belovsky, G.E., J. Fryxell and O.J. Schmitz. 1999. Natural selection and herbivore nutrition: optimal foraging theory and what it tells us about the structure of ecological communities. Pages 1 to 70 in H-J. G. Jung and G.C. Fahey, Jr. (eds.) Nutritional Ecology of Herbivores - Proceedings of the Vth International Symposium on the Nutrition of Herbivores. Am. Soc. Anim. Sci. Savoy, Illinois.

Bernays, E.A., K.L. Bright, L. Gonzalez and J. Angel. 1994. Dietary mixing in a generalist herbivore: tests of two hypotheses. Ecology 75:1997-2006.

Black, J.L. and P.A. Kenny. 1984. Factors affecting diet selection by sheep. II. Height and density of pasture. Aust. J. Agric. Res. 35:565-578.

Bork, E.W., N.E. West and J.W. Walker. 1998. Cover components on long-term seasonal sheep grazing treatments in three-tip sagebrush steppe. J. Range Manage. 51:293-300.

Braun, C.E., T. Britt and R.O. Wallestad. 1977. Guidelines for maintenance of sage grouse habitats. Wildl. Soc. Bull. 5:99-106.

Bray, R.O., C.L. Wambolt, and R.G. Kelsey. 1991. Influence of sagebrush terpenoids on mule deer preference. J. Chem. Ecol. 17:2053-2062.

Burkhardt, J.W. 1996. Herbivory in the Intermountain West. Idaho Forest, Wildlife and Range Experiment Station Bulletin 58. Moscow, Idaho.

Burritt, E.A. and F.D. Provenza. 2000. Role of toxins in intake of varied diets by sheep. J. Chem. Ecol. 26:1991-2005.

Carpenter, L.H. 1976. Nitrogen-herbicide effects on sagebrush deer range. Ph.D. Thesis. Colorado State University, Ft. Collins, CO.

Carpenter, L.H., O.C. Wallmo and B.B. Gill. 1979. Forage diversity and dietary selection by mule deer. J. Range. Manage. 32:226-229.

Cheeke, P. 1998. Natural toxicants in feeds, forages and poisonous plants. Interstate Publ. Danville, IL.

Cheeke, P., and L.R. Shull. 1985. Natural toxicants in feeds and poisonous plants. Avi Publishing Co. Westport, CT.

Conover, M.R., W.C. Pitt, K.K. Kessler, T.J. DuBow, and W.A. Sanborn. 1995. Review of data on human injuries, illnesses, and economic losses caused by wildlife in the United States. Wildl. Soc. Bull. 23:407-414.

Cooper, S.D.B., I. Kyriazakis, D.H. Anderson and J.D. Oldham. 1993. The effect of physiological state (Late pregnancy) on the diet selection of ewes. Anim. Prod. 56:469A.

Critchley, H.D. and Rolls, E.T. 1996. Hunger and satiety modify the responses of olfactory and visual neurons in the primate orbitofrontal cortex. J. Neurophysiol. 75:1673-1686.

Dearing, M.D. and S. Cork. 1999. Role of detoxification of plant secondary compounds on diet breadth in a mammalian herbivore, *Trichosurus vulpecula*. J. Chem. Eco. 25:1205-1219.

Demment, A.W., R.A. Distel, T.C. Griggs, E.A. Laca and G.P. Deo. 1993. Selective behaviour of cattle grazing ryegrass swards with horizontal heterogeneity in patch height and bulk density. Pages 712-714 in Proc. XVII International Grassland Congress.

Dudzinski, M.L., W.J. Muller, W.A. Low and H.J. Schuh. 1982. Relationship between dispersion behaviour of free-ranging cattle and forage conditions. Appl. Anim. Ethol. 8:225-241.

Duke, J.A. 2008. The Green Pharmacy: Guide to Healing Foods. Rodale Inc. Kutztown, PA

Early, D. and F.D. Provenza. 1998. Food flavor and nutritional characteristics alter dynamics of food preference in lambs. J. Anim. Sci. 76:728-734.

Edwards, G.R., J.A. Newman, A.J. Parsons, and J.R. Krebs. 1994. Effects of the scale and spatial distribution on the food resource and animal state on diet selection: an example with sheep. J. Anim. Ecol. 63:816-826.

Emmick, D. (ed.). 2000. Prescribed grazing and feeding management for lactating dairy cows. New York State Grazing Lands Conservation Initiative in Cooperation with the USDA-Natural Resources Conservation Service. Syracuse, New York.

Engel, C. 2002. Wild Health: How Animals Keep Themselves Well and What We Can Learn From Them. Houghton Mifflin Co., New York, NY.

Foley, W.J. 1992. Nitrogen and energy retention and acid-base status in the common ringtail possum (*Pseudocheirus peregrinus*): Evidence of the effects of absorbed allelochemicals. Physiol. Zool. 65:403-421.

Foley, W.J., and C. McArthur. 1994. The effects and costs of allelochemicals for mammalian herbivores: an ecological perspective. Pages 370-391 in D.J. Chivers and P. Langer (eds.) The Digestive System in Mammals: Food, Form and Function. Cambridge Univ. Press. Cambridge, U.K.

Foley, W.J., S. McLean, and S.J. Cork. 1995. Consequences of biotransformation of plant secondary metabolites on acid-base metabolism in mammals - A final common pathway? J. Chem. Ecol. 21:721-743.

Foley, W.J., G.R. Iason, and C. McArthur. 1999. Role of plant secondary metabolites in the nutritional ecology of mammalian herbivores: How far have we come in 25 years? Pages 130-209 in H.G. Jung and G.C. Fahey, Jr. (eds.) Nutritional Ecology of Herbivores. Proc. Vth Int. Symp. Nutr. Herb. Am. Soc. Anim. Sci., IL.

Freeland, W.J., and D.H. Janzen. 1974. Strategies in herbivory by mammals: The role of plant secondary compounds. Am. Nat. 108:269-287.

Freeland, W.J., and Choquenot, D. 1990. Determinants of herbivore carrying capacity: Plants, nutrients, and *Equus asinus* in northern Australia. Ecology 71:589-597.

Freeland, W.J., P.H. Calcott and L.R. Anderson. 1985. Tannins and saponin: interaction in herbivore diets. Biochem. Syst. Ecol. 13:189-193.

Guglielmo, C.G., Karasov, W.H., and W.J. Jakubas. 1996. Nutritional costs of a plant secondary metabolite explain selective foraging by ruffed grouse, Ecology 77:1103-1115.

Illius, A.W., and N.S. Jessop. 1995. Modeling metabolic costs of allelochemical ingestion by foraging herbivores. J. Chem. Ecol. 21:693-719.

Illius, A.W., and N.S. Jessop. 1996. Metabolic constraints on voluntary intake in ruminants. J. Anim. Sci. 74:3052-3062.

Illius, A.W. and J. Hodgson. 1996. Progress in understanding the ecology and management of grazing systems. Pages 429-457 in J. Hodgson and A.W. Illius (eds.) The ecology and management of grazing systems. Commonwealth Agricultural Bureau International, Wallingford, UK.

Illius, A.W., I.J. Gordon, D.A. Elston and J.D. Milne. 1999. Diet selection in goats: a test of intake-rate maximization. Ecology 80:1008-1018.

Johnson, A.E., L.F. James and J. Spillet. 1976. The abortifacient and toxic effects of big sagebrush (*Artemisia tridentata*) and juniper (*Juniperus osteosperma*) on domestic sheep. J. Range. Manage. 29:278-280.

Kaiser, J. 2000. Rift over biodiversity divides ecologists. Science 289:1282-1283.

Krebs, J.R. and M.L. Avery. 1984. Chick growth and prey quality in the European bee-eater (*Merops apiaster*). Oecologia 64:363-368.

Kyriazakis, I. and J.D. Oldham. 1993. Diet selection in sheep: The ability of growing lambs to select a diet that meets their crude protein (nitrogen x 6.25) requirements. Br. J. Nutr. 69:617-629.

Kyriazakis, I., J.D. Oldham, R.L. Coop and F. Jackson. 1994. The effect of subclinical intestinal nematode infection on the diet selection of growing sheep. Br. J. Nutr. 72:665-677.

Landsberg, J. T. O’Conner and D. Freudenberger. 1999. The impacts of livestock grazing on biodiversity in natural systems. Pages 752 to777 in H-J. G. Jung and G.C. Fahey, Jr. (eds.) Nutritional Ecology of Herbivores - Proceedings of the Vth International Symposium on the Nutrition of Herbivores. Am. Soc. Anim. Sci. Savoy, Illinois.

Langvatn, R. and T.A. Hanley. 1993. Feeding-patch choice by red deer in relation to foraging efficiency. Oecologia 95:164-170.

Longhurst, W.M., H.K. Oh, M.B. Jones and R.E. Kepner. 1968. A basis for the palatability of deer forage plants. Trans. North Am. Wildl. Nat. Resour. Conf. 33:181-89.

Meuret, M., C. Viauz, and J. Chadoeuf. 1994. Land heterogeneity stimulates intake during grazing trips. Ann. Zootech. 43:296.

Meuret, M., & Provenza, F.D. 2014. The art & science of shepherding: tapping the wisdom of French herders. Austin: Acres U.S.A.

Meuret, M., & Provenza, F.D. 2015. When art and science meet: Integrating knowledge of French herders with science of foraging behavior. Rangeland Ecology & Management, 68, 1–17.

Milchunas, D.G., O. Sala and W.K. Lauenroth. 1988. A generalized model on the effects of grazing by large herbivores on grassland community structure. Am. Nat 132:87-106.

Mote, T., J.J. Villalba and F.D. Provenza. 2007. Relative availability of tannin- and terpene-containing foods affects food intake and preference by lambs. J. Chem. Ecol. 33:1197-1206.

Mote, T., J.J. Villalba and F.D. Provenza. 2008. Foraging sequence influences the ability of lambs to consume foods containing tannins and terpenes. Appl. Anim. Behav. Sci. In Press.

Nagy, J.G., and R.P. Tengerdy. 1968. Antibacterial action of essential oils of Artemisia as an ecological factor. II. Antibacterial action of the volatile oils of *Artemisia Tridentata* (big sagebrush) on bacteria from the rumen of mule deer. Appl. Microbiol. 16:441-444.

Ngugi, R.K., F.C. Hinds and J. Powell. 1995. Mountain big sagebrush browse decreases dry matter intake, digestibility and nutritive quality of sheep diets. J. Range Manage. 48:487-492.

Oh, H.K., M.B. Jones and W.M. Longhurst. 1968. Comparison of rumen microbial inhibition resulting from various essential oils isolated from relatively unpalatable plants. Appl. Microbiol. 16:39-44.

Olff, H. and M.E. Ritchie. 1998. Effects of herbivores on grassland plant diversity. TREE 13: 261-265.

Osweiler, G.D., T.L. Carson, W.B. Buck and G.A. Van Gelder. 1985. Clinical and Diagnostic Veterinary Toxicology. Kendall/Hunt. Dubuque, Iowa.

Palo, R.T., and C. T. Robbins. 1991 Plant Defenses Against Mammalian Herbivory. CRC Press, Boca Raton, FL, USA.

Papachristou, T.G. L.E. Dziba, J.J. Villalba and F.D. Provenza. 2007. Patterns of diet mixing by sheep offered foods varying in nutrients and plant secondary compounds. Appl. Anim. Behav. Sci. 108:68-80.

Pennings, S.C., T. Masatomo, T. Nadeau and V.J. Paul. 1993. Selectivity and growth of the generalist herbivore *Dolabella auricularia* feeding upon complementary resources. Ecology 74:879-890.

Perez, C., K. Ackroff and A. Sclafani. 1996. Carbohydrate- and protein-conditioned flavor preferences: effects of nutrient preloads. Phys. Behav. 59:467-474.

Personius, T.L., C.L. Wambolt, J.R. Stephens, and R.G. Kelsey. 1987. Crude terpenoid influence on mule deer preference for sagebrush. J. Range Manage. 40:84-88.

Pfister, J.A., F.D. Provenza, G.D. Manners, D.R. Gardner and M.H. Ralphs. 1997. Tall larkspur ingestion: Can cattle regulate intake below toxic levels? J. Chem. Ecol. 23:759-777.

Plummer, A.P., D.R. Christensen and S.B. Monsen. 1968. Restoring Big-Game Range in Utah. Utah Division of Fish and Game Pub. No. 68-3.

Pollan, M. 2006. The Omnivore’s Dilemma. The Penguin Press. New York, NY.

Pollan, M. 2008. In Defense of Food: The Eater’s Manifesto. The Penguin Press. New York, NY.

Provenza, F.D. 1996. Acquired aversions as the basis for varied diets of ruminants foraging on rangelands. J. Anim. Sci. 74:2010-2020.

Provenza, F.D. 2003. Twenty-five years of paradox in plant-herbivore interactions and “sustainable” grazing management. Rangelands 25:4-15.

Provenza, F.D. 2003. Foraging Behavior: Managing to Survive in a World of Change. Utah State Univ. Logan, UT.

Provenza, F.D., J.J. Villalba and J.P. Bryant. 2003. Foraging by herbivores: Linking the biochemical diversity of plants with herbivore culture and landscape diversity. Pages 387-421 in J.A. Bissonette and I. Storch (eds.) Landscape Ecology and Resource Management: Linking Theory with Practice. Island Press, NY.

Provenza, F.D., J.J. Villalba, L.E. Dziba, S.B. Atwood and R.E. Banner. 2003. Linking herbivore experience, varied diets, and plant biochemical diversity. Small Rum. Res. 49:257-274.

Provenza, F.D. J.J. Villalba, J.H. Haskell, J.A. MacAdam, T.C. Griggs and R.D. Wiedmeier. 2007. The value to herbivores of plant physical and chemical diversity in time and space. Crop Sci. 47:382-398.

Rapport, D.J. 1971. An optimization model of food selection. Am. Nat. 105:575-587.

Raubenheimer, D. 1992. Tannic acid, protein and digestible carbohydrates: dietary imbalances and nutritional compensation in locusts. Ecol. 73:1012-27.

Rogosic, J., J.A. Pfister, F.D. Provenza and D. Grbesa. 2006. Sheep and goats preference for and nutritional value of Mediterranean maquis shrubs. Small Ruminant Res. 64:169-179.

Rogosic, J. J.A. Pfister, F.D. Provenza and D. Grbesa. 2006. The effect of activated charcoal and number of species offered on intake of Mediterranean shrubs by sheep and goats. Appl. Anim. Behav. Sci. 101:305-317.

Rogosic, J. J.A. Pfister and F.D. Provenza. 2008. The effect of number of shrub species and polyethylene glycol on intake of Mediterranean shrubs by sheep and goats. J. Anim. Sci. 86: 3491-3496.

Savory, A. 1988. Holistic Resource Management. Island Press, Washington, D.C.

Schmidt, K.S., J.S. Brown and R.A. Morgan. 1998. Plant defense as complementary resources: a test with squirrels. Oikos 81:130-142.

Scott, L.L., and F.D. Provenza. 1998. Variety of foods and flavors affects selection of foraging locations by sheep. Appl. Anim. Behav. Sci. 61:113-122.

Scott, L.L. and F.D. Provenza. 2000. Lambs fed protein or energy imbalanced diets forage in locations and on foods that rectify imbalances. Appl. Anim. Behav. Sci. 68:293-305.

Simpson, S.J. and D. Raubenheimer. 1993. A multi-level analysis of feeding behavior: the geometry of nutritional decisions. Phil. Trans. R. Soc. Lond. B. 342:381-402.

Simpson S.J. and D. Raubenheimer. 1999. Assuaging nutritional complexity: a geometrical approach. Proc. Nutr. Soc. 58:779-789.

Simpson, S.J., and D. Raubenheimer. 2000. The hungry locust. Adv. Study of Behav. 29:1-43.

Smith, A.D. 1959. Adequacy of some important browse species in overwintering mule deer. J. Range. Manage 12:9-13.

Spalinger, D.E., T.A. Hanley and C.T. Robbins. 1988. Analysis of the functional response in foraging in the Sitka black-tailed deer. Ecology 69:1166-1175.

Taubes, G. 2007. Good Calories, Bad Calories. Alfred A. Knopf, New York, NY.

Thomas, D.W., C. Samson, and J.M. Bergeron. 1988. Metabolic costs associated with the ingestion of plant phenolics by *Microtus pennsylvanicus.* J. Mammal. 69:512-515.

van Wieren, S.E. 1996. Do large herbivores select a diet that maximizes short-term energy intake? Forest Ecol. Manage. 88:149-156.

Villalba, J.J. and F.D. Provenza. 1996. Preference for flavored wheat straw by lambs conditioned with intraruminal administrations of sodium propionate. J. Anim. Sci. 74:2362-2368.

Villalba, J.J., and F.D. Provenza. 2007. Self-medication and homeostatic endeavor in herbivores: learning about the benefits of nature’s pharmacy. Animal 1:1360-1370.

Villalba, J.J., F.D. Provenza, and R.E. Banner. 2002. Influence of macronutrients and activated charcoal on utilization of sagebrush by sheep and goats. J. Anim. Sci. 80:2099-2109.

Villalba, J.J., F.D. Provenza, and R.E. Banner. 2002. Influence of macronutrients and polyethylene glycol on intake of a quebracho tannin diet by sheep and goats. J. Anim. Sci. 80:3154-3164.

Villalba, J.J., F.D. Provenza, and J.P. Bryant. 2002. Consequences of nutrient-toxin interactions for herbivore selectivity: benefits or detriments for plants? Oikos 97:282-292.

Villalba, J.J., F.D. Provenza, and GouDong. 2004. Experience influences diet mixing by herbivores: Implications for plant biochemical diversity. Oikos 107:100-109.

Villalba, J.J. and F.D. Provenza. 2005. Foraging in chemically diverse environments: Energy, protein and alternative foods influence ingestion of plant secondary metabolites by lambs. J. Chem. Ecol. 31:123-138.

Wallestad, R.O. 1971. Summer movements and habitat use by sage grouse broods in central Montana. J. Wildl. Manage. 35:129-136.

Wang, J. and F.D. Provenza. 1996. Food deprivation affects preference of sheep for foods varying in nutrients and a toxin. J. Chem. Ecol. 22:2011-2021.

Wang, J. and F.D. Provenza. 1997. Dynamics of preference by sheep offered foods varying in flavors, nutrients, and a toxin. J. Chem. Ecol. 23:275-288.

West, N. E. 1993. Biodiversity of rangelands. J. Range Manage. 46:2-13.

West, N.E. 1999. Juniper-pinon savannas and woodlands of western North America. Pages 288-308 in R.C. Anderson, J.S. Fralish and J.M. Baskin (eds.) Savannas, Barrens, and Rock Outcrop Plant Communities of North America. Cambridge University Press, New York.

West, N.E. and J.A. Young. 2000. Intermountain valleys and lower mountain slopes. Pages 256-284 in M.G. Barbour and W.D. Billings (eds.) North American Terrestrial Vegetation. 2nd ed. Cambridge Univ. Press, NY.

Westoby, M. 1978. What are the biological bases of varied diets? Am. Nat. 112:627-631.

Williams, R.J. 1978. You are extraordinary, Pages 121-123 in The Art of Living. Berkeley Books, New York, NY.

Wilmshurst, J.F. and J.M. Fryxell. 1995. Patch selection by red deer in relation to energy and protein intake: a re-evaluation of Langvatn and Hanley's (1993) results. Oecologia 104:297-300.

Wilmshurst, J.F., J.M Fryxell and R.J. Hudson. 1995. Forage quality and patch choice by wapiti (*Cervus elaphus*). Behavioral Ecology 6:209-217.

**Cultural Linkages**

Andersen, R. 1991. Habitat deterioration and the migratory behaviour of moose (*Alces alces* L.) in Norway. J. Appl. Ecol. 28:102-108.

Aoki, C., and P. Siekevitz. 1988. Plasticity in brain development. Sci. Am. 256:56-64.

Beck, B.B., L.G. Rapaport, S. Price, M.R. Wilson and A.C. Wilson. 1994. Reintroduction of captive-born animals. Pages 265-286 in P.J. Olney, G.M. Mace and A.T. Feistner (eds.) Creative conservation: interactive management of wild and captive animals. Chapman and Hall, London.

Biquand, S. and V. Biquand-Guyot. 1992. The influence of peers, lineage and environment on food selection of the criollo goat (*Capra hircus*). Appl. Anim. Behav. Sci. 34:231-245.

Birch, L.L. and D.W. Marlin. 1982. I don't like it; I never tried it: Effects of exposure to food on two-year-old children's food preferences. Appetite 4:353-360.

Brothers, L. 1997. Friday's Footprint. Oxford University Press, New York.

Chadwick, M.A., Vercoe, P.V., Williams, I.H., Revell, D.K., 2009. Programming sheep production on saltbrush: adaptations of offspring from ewes that consumed high amounts of salt during pregnancy and early lactation. Anim. Prod. Sci. 49, 311-317.

Chadwick, M.A., Vercoe, P.V., Williams, I.H., Revell, D.K., 2009. Dietary exposure of pregnant ewes to salt dictates how their offspring respond to salt. Physiol. Behav. 97, 437-445.

Chadwick, M.A., Vercoe, P.V., Williams, I.H., Revell, D.K., 2009. Feeding pregnant ewes a high-salt diet or saltbrush suppresses their offspring’s postnatal rennin activity. Animal 3, 972-979.

Coppersmith, R. and M. Leon. 1984. Enhanced neural response to familiar olfactory cues. Science 225:849-851.

Datta, F.U., J.V. Nolan, J.B. Rowe, G.D. Gray and B.J. Crook. 1999. Long-term effects of short-term provision of protein-enriched diets on resistance to nematode infection, and live-weight gain and wool growth in sheep. Int. J. Parasitol. 29:479-488.

Davis, J.M. and J.A. Stamps. 2004. The effect of natal experience on habitat preferences. TREE 19:411-416.

deWaal, F. 2001. The Ape and the Sushi Master: Cultural Reflections of a Primatologist. Basic Books, New York, NY.

Distel, R.A. and F.D. Provenza. 1991. Experience early in life affects voluntary intake of blackbrush by goats. J. Chem. Ecol. 17:431-450.

Distel, R.A., J.J. Villalba and H.E. Laborde. 1994. Effects of early experience on voluntary intake of low-quality roughage by sheep. J. Anim. Sci. 72:1191-1195.

Distel, R.A., J.J. Villalba, H.E. Laborde and M.A. Burgos. 1996. Persistence of the effects of early experience on consumption of low-quality roughage by sheep. J. Anim. Sci. 74:965-968.

Dufty, A.M. Jr., Clobert, J. and Moller, A.P. 2002. Hormones, developmental plasticity and adaptation. TREE 17:190-196.

Flores, E.R., F.D. Provenza and D.F. Balph. 1989. Role of experience in the development of foraging skills of lambs browsing the shrub serviceberry. Appl. Anim. Behav. Sci. 23:271-278.

Flores, E.R., F.D. Provenza and D.F. Balph. 1989. The effect of experience on the foraging skill of lambs: importance of plant form. Appl. Anim. Behav. Sci. 23:285-291.

Flores, E.R., F.D. Provenza and D.F. Balph. 1989. Relationship between plant maturity and foraging experience of lambs grazing hycrest crested wheatgrass. Appl. Anim. Behav. Sci. 23:279-284.

Freeman, W.J. 1991. The physiology of perception. Scientific American. 264:78-85.

Giraldeau, L. And T. Caraco. Social Foraging Theory. 2000. Princeton Univ. Press, Princeton, NJ.

Green, G.C., R.L. Elwin, B.E. Mottershead and J.J. Lynch. 1984. Long-term effects of early experience to supplementary feeding in sheep. Proc. Aust. Soc. Anim. Prod. 15:373-375.

Howery, L.D., F.D. Provenza, R.E. Banner and C.B. Scott. 1996. Differences in home range and habitat use among individuals in a cattle herd. Appl. Anim. Behav. Sci. 49:305-320.

Howery, L.D., F.D. Provenza, R.E. Banner and C.B. Scott. 1998. Social and environmental factors influence cattle distribution on rangeland. Appl. Anim. Behav. Sci., 55:231-244.

Hunter, R.F. and C. Milner. 1963. The behaviour of individual, related and groups of south country Cheviot hill sheep. Anim. Behav. 11:507-513.

Jablonka, E., M.J. Lamb and E. Avital. 1998. ‘Lamarckian’ mechanisms in Darwinian evolution. TREE 13:206-210.

Key, C. and R.M. MacIver. 1980. The effects of maternal influences on sheep: breed differences in grazing, resting and courtship behaviour. Appl. Anim. Ethol. 6:33-48.

Knubel, B.F.R., K.E. Panter and F.D. Provenza. 2004. Pregnancy in goats does not influence intake of novel or familiar foods with or without toxins. Appl. Anim. Behav. Sci. 85:293-305.

LeDoux. J. 2002. Synaptic Self: How Our Brains Become Who We Are. Viking Penguin, NY.

Lewontin, R. 2000. The Triple Helix: Gene, Organism, and Environment. Harvard Univ. Press, Cambridge, MA.

McCormick, J.A., V. Lyons, M.D. Jacobson, J. Noble, J. Diorio, M. Nyirenda, S. Weaver, W. Ester, J.L. Yau, M.J. Meaney, J.R. Seckl and K.E. Chapman. 2000. 5'-heterogeneity of glucocorticoid receptor messenger RNA is tissue specific: differential regulation of variant transcripts by early-life events. Mol. Endocrinol. 14:506-517.

McNulty, S.A., W.F. Porter, N.E. Mathews and J.A. Hill. 1997. Localized management for reducing white-tailed deer populations. Wildl. Soc. Bull. 25:265-271.

Mirza, S.N. and F.D. Provenza. 1990. Preference of the mother affects selection and avoidance of foods by lambs differing in age. Appl. Anim. Behav. Sci. 28:255-263.

Mirza, S.N. and F.D. Provenza. 1992. Effects of age and conditions of exposure on maternally mediated food selection in lambs. Appl. Anim. Behav. Sci. 33:35-42.

Mirza, S.N. and F.D. Provenza. 1994. Socially induced food avoidance in lambs: Direct or indirect maternal influence? J. Anim. Sci. 72:899-902.

Moore, D.S. 2002. The Dependent Gene: The Fallacy of “Nature vs. Nurture.” Henry Holt and Company, New York, NY.

Mosley, J.C. 1999. Influence of social dominance on habitat selection by free-ranging ungulates. Pages 109-118 in K.L. Launchbaugh, J.C. Mosley and K.D. Sanders (eds.) Grazing Behavior of Livestock and Wildlife. Idaho Forest, Wildlife & Range Experiment Station Bulletin #70. University of Idaho, Moscow.

Nolte, D.L., F.D. Provenza and D.F. Balph. 1990. The establishment and persistence of food preferences in lambs exposed to selected foods. J. Anim. Sci. 68:998-1002.

Nolte, D.L., F.D. Provenza, R. Callan and K.E. Panter. 1992. Garlic in the ovine fetal environment. Physiol. Behav. 52:1091-1093.

Nolte, D.L. and F.D. Provenza. 1992. Food preferences in lambs after exposure to flavors in milk. Appl. Anim. Behav. Sci. 32:381-389.

Nolte, D.L. and F.D. Provenza. 1992. Food preferences in lambs after exposure to flavors in solid foods. Appl. Anim. Behav. Sci. 32:337-347.

Ortega Reyes, L., F.D. Provenza, C.F. Parker and P.G. Hatfield. 1992. Drylot performance and ruminal papillae development of lambs exposed to a high concentrate diet while nursing. Small Rum. Res. 7:101-112.

Ortega-Reyes L. and F.D. Provenza. 1993. Amount of experience and age affect the development of foraging skills of goats browsing blackbrush (*Coleogyne ramosissima*). Appl. Anim. Behav. Sci. 36:169-183.

Ortega-Reyes L. and F.D. Provenza. 1993. Experience with blackbrush affects ingestion of shrub live oak by goats. J. Anim. Sci. 71:380-383.

Paul, A.M. (2010). Origins: How the Nine Months before Birth Shape the Rest of Our Lives. New York: Simon & Schuster.

Piersma, T., and A. Lindstrom. 1997. Rapid reversible changes in organ size as a component of adaptive behaviour. TREE 12:134-138.

Profet, M. 1992. Pregnancy sickness as adaptation: A deterrent to maternal ingestion of teratogens. Pages 327-366 in J. H. Barkow, L. Cosmides and J. Tooby (eds.) The Adapted Mind - Evolutionary Psychology and the Generation of Culture. Oxford Univ. Press, New York, NY.

Provenza, F.D. 1994. Ontogeny and social transmission of food selection in domesticated ruminants. Pages 147-164 in B.G. Galef Jr., M. Mainardi and P. Valsecchi (eds.) Behavioral aspects of feeding: Basic and applied research in mammals. Harwood Acad. Pub., Singapore.

Provenza, F.D. 1995. Tracking variable environments: There is more than one kind of memory. J. Chem. Ecol. 21:911-923.

Provenza, F.D. 2008. What does it mean to be locally adapted and who cares anyway? J. Anim. Sci. 86:E271-E284.

Provenza, F.D. and D.F. Balph. 1988. The development of dietary choice in livestock on rangelands and its implications for management. J. Anim. Sci. 66:2356-2368.

Provenza, F.D. and R.P. Cincotta. 1993. Foraging as a self-organizational learning process: accepting adaptability at the expense of predictability. Pages 78-101 in R.N. Hughes (ed.) Diet Selection. Blackwell Sci. Publ. Ltd., London.

Provenza, F.D., J.J. Lynch and J.V. Nolan. 1993. The relative importance of mother and toxicosis in the selection of foods by lambs. J. Chem. Ecol. 19:313-323.

Provenza, F.D., J.J. Villalba, C.D. Cheney and S.J. Werner. 1998. Self-organization of foraging behavior: from simplicity to complexity without goals. Nutr. Res. Rev. 11:1-24.

Provenza, F.D., J.J. Villalba and M. Augner. 2000. The physics of foraging. Volume III, Pages 99-107 in J.G. Buchanan-Smith, L.D Bailey and P. McCaughey (eds.) Proceedings of the XVIII International Grassland Congress. Extension Service, Saskatchewan Agriculture & Food. Saskatoon, Saskatchewan.

Ralphs, M.H. 1997. Persistence of aversion to larkspur in naive and native cattle. J. Range. Manage. 50:367-370.

Ralphs, M. H. and F.D. Provenza. Conditioned food aversions: Principles and practices, with special reverence to social facilitation. Proc. Nutr. Soc. 58:813-820.

Roath, L.R. and W.C. Krueger. 1982. Cattle grazing and behavior on a forested range. J. Range Manage. 35:332-338.

Robinson, G.E. 2004. Beyond nature and nurture. Science 304:397-399.

Rozin, P. 1988. Social learning about food by humans. Pages 165-187 in T.R. Zentall and B.G. Galef, Jr. (Eds.) Social Learning: Psychological and Biological Perspectives. Lawrence Erlbaum Associates, Hillsdale, NJ.

Rozin, P. Sociocultural influences on human food selection. Pages 233-263 in E.D. Capaldi (Ed.) Why We Eat What We Eat: The Psychology of Eating. American Psychological Association, Washington, D.C.

Schlichting, C.D., and M. Pigliucci. 1998. Phenotypic Evolution: A Reaction Norm Perspective. Sinauer Publications, Sinauer, MA.

Scott, C.B., F.D. Provenza, and R.E. Banner. 1995. Dietary habits and social interactions affect choice of feeding location by sheep. Appl. Anim. Behav. Sci. 45:225-237.

Scott, C.B., R.E. Banner and F.D. Provenza. 1996. Observations of sheep foraging in familiar and unfamiliar environments: familiarity with the environment influences diet selection by sheep. Appl. Anim. Behav. Sci. 49:165-171.

Shepherdson, D. 1994.The role of environmental enrichment in the captive breeding and reintroduction of endangered species. Pages 167-177 in P.J. Olney, G.M. Mace and A.T. Feistner (eds.) Creative conservation: interactive management of wild and captive animals. Chapman and Hall, London.

Simitzis, P.E., S.G. Deligeorgis, J.A. Bizelis and K. Fegeros. 2008. Feeding preferences in lambs influenced by prenatal flavour exposure. Physiol. Behav. 93:529-536.

Squibb, R.C., F.D. Provenza and D.F. Balph. 1990. Effect of age of exposure on consumption of a shrub by sheep. J. Anim. Sci. 68:987-997.

Stamps, J. 2001. Habitat selection by dispersers: proximate and ultimate approaches. Pages 230-242 in Clobert, J., E. Danchin, A.A. Dhondt, and J. Nichols (eds.), Dispersal. Oxford Univ. Press.

Thorhallsdottir, A.G., F.D. Provenza and D.F. Balph. 1990. Ability of lambs to learn about novel foods while observing or participating with social models. Appl. Anim. Behav. Sci. 25:25-33.

Thorhallsdottir, A.G., F.D. Provenza and D.F. Balph. 1990. The role of the mother in the intake of harmful foods by lambs. Appl. Anim. Behav. Sci. 25:35-44.

Tzack, A.G., E.D. Ungar, S.Y. Landau, A. Perevolotsky, H. Muklada and J.W. Walker. 2009. Breed and maternal effects on the intake of tannin-rich browse by juvenile goats (*Capra hircus*). Appl. Anim. Behav. Sci. 119:71-77.

Wiedmeier, R.D., F.D. Provenza and E.A. Burritt. 2002. Performance of mature beef cows wintered on low-quality forages is affected by short-term exposure to the forages as suckling heifer calves. J. Anim. Sci. 80:2340-2348.

Wiedmeier, R.W., Villalba, J.J., Summers, A., & Provenza, F.D. (2012). Eating a high-fiber diet during pregnancy increases intake and digestibility of a high-fiber diet by offspring in cattle. Animal Feed Science and Technology. 177:144-151.

Zimmerman, E.A. 1980. Desert ranching in central Nevada. Rangelands 2:184-186.

**Nourishing Relationships**

Alcock, J., Maley, C.C., & Aktipis, C.A. (2014). Is eating behavior manipulated by the gastrointestinal microbiota? Evolutionary pressures and potential mechanisms. Bioessays, 36, 940-949.

Allison, M.J., Littledike, E.T., & James, L.F. (1977). Changes in ruminal oxalate degradation rates associated with adaptation to oxalate ingestion Journal of Animal Science, 45, 1173-1179.

Allison, M.J., Hammond, A.C., & Jones, R.J. (1990). Detection of ruminal bacteria that degrade toxic dihydroxypyridine compounds produced from mimosine. Applied and Environmental Microbiology, 56, 590-594.

Ames, B.N. (2006). Low micronutrient intake may accelerate the degenerative diseases of aging through allocation of scarce micronutrients by triage. Proceedings of the National Academy of Sciences, 103, 17589-17594.

Arbesman, S. (2013). The half-life of facts: why everything we know has an expiration date. New York: Penguin Group.

Archer, E. (2014). The childhood obesity epidemic as a result of nongenetic evolution: the maternal resources hypothesis. Mayo Clinic Proceedings, XX, 1-16.

Armelagos, G.A. (2014). Brain evolution, the determinates of food choice, and the omnivore’s dilemma. Critical Reviews in Food Science and Nutrition, 54:1330–1341.

Arya, F., Egger, S., Colquhoun, D., Sullivan, D., Pal, S., & Egger, G. (2010). Differences in postprandial inflammatory responses to a ‘modern’ v. traditional meat meal: a preliminary study. British Journal Nutrition, 104, 724-728.

Atwood, S.B., Provenza F.D., Wiedmeier R.D., & Banner R.E. (2001a). Changes in preferences of gestating heifers fed untreated or ammoniated straw in different flavors. Journal of Animal Science, 79, 3027-3033.

Atwood, S.B., Provenza F.D., Wiedmeier R.D., & Banner R.E. (2001b). Influence of free-choice versus mixed-ration diets on food intake and performance of fattening calves. Journal of Animal Science, 79, 3034-3040.

Avena, N.M., Rada, P., Hoebel, B.G. (2008). Evidence for sugar addiction: Behavioral and neurochemical effects of intermittent, excessive sugar intake. Neuroscience & Biobehavioral Reviews, 32, 20–39.

Bailey, D.W., & Provenza, F.D. (2008). Mechanisms determining large-herbivore distribution. In: H.H.T. Prins, & F. van Langevelde (Eds), Resource ecology: spatial and temporal dynamics of foraging (pp. 7-28). Springer, The Netherlands.

Bailey, D.W., Stephenson, M.B., & Pittarello, M. (2015). Effect of resource and terrain heterogeneity on the feeding site selection and livestock movement patterns. Animal Production Science, 55, 298-308.

Bang, H.O. & Dyerberg, J. (1980). Lipid metabolism and ischemic heart disease in Greenland Eskimos. Advances in Nutrition Research, 3, 1– 22.

Banner, R.E., Rogosic, J., Burritt, E.A., & Provenza, F.D. (2000). Supplemental barley and activated charcoal increase intake of sagebrush by lambs. Journal of Range Management, 53, 415-420.

Baranski, M., Srednicka-Tober, M., Volakakis, N., Seal, C., Sanderson, R., Stewart, G.B., Benbrook, C., Biavati, B., Markellou, E., Giotis, C., Gromadzka-Ostrowska, J., Rembiałkowska, E., Skwarło-Sonta, K., Tahvonen, R., Janovska, D., Niggli, U., Nicot, P., & Leifert, C. (2014). Higher antioxidant and lower cadmium concentrations and lower incidence of pesticide residues in organically grown crops: a systematic literature review and meta-analyses. British Journal of Nutrition, in press 10.1017/S0007114514001366

Barclay, A.W., Petocz, P., McMillan-Price, J., Flood, V.M., Prvan, T., Mitchell, P., & Brand Miller, J.C. (2008). Glycemic index, glycemic load, and chronic disease risk—a meta-analysis of observational studies. American Journal of Clinical Nutrition, 87, 627-37.

Bartoshuk, L.M., & Klee, H.J. (2013). Better fruits and vegetables through sensory analysis. Current Biology, 23, R374–R378.

Barzel, U.S. (1995). The skeleton as an ion exchange system: implications for the role of acid-base imbalance in the genesis of osteoporosis. Journal of Bone and Mineral Research, 10, 1431-1436.

Bazely, D.R. (1989). Carnivorous herbivores: Mineral nutrition and the balanced diet. Trends in Ecology and Evolution, 41, 55-156.

Biesiekierski, J.R., Peters, S.L., Newnham, E.D., Rosella, O., Muir, J.G., Gibson, P.R. (2013). No effects of gluten in patients with self-reported non-celiac gluten sensitivity after dietary reduction of fermentable, poorly absorbed, short-chain carbohydrates. Gastroenterology, 145, 320–328.

Biquand, S., & Biquand-Guyot, V. (1992). The influence of peers, lineage and environment on food selection of the criollo goat (Capra hircus). Applied Animal Behaviour Science, 34, 231-245.

Birch, L.L. & Marlin D.W. (1982). I don't like it; I never tried it: Effects of exposure to food on two-year-old children's food preferences. Appetite, 4, 353-360.

Bjelakovic, G., Nikolova, D., Gluud, C. (2013). Meta-regression analyses, meta-analyses, and trial sequential analyses of the effects of supplementation with beta-carotene, vitamin A, and vitamin E singly or in different combinations on all-cause mortality: do we have evidence for lack of harm? PLoS ONE 8(9): e74558. doi:10.1371/journal.pone.0074558.

Bjorklund, E.A., Heins, B.J., DiCostanzo, A., & Chester-Jones, H. (2014). Fatty acid profiles, meat quality, and sensory attributes of organic versus conventional dairy beef steers. Journal of Dairy Science, 97, 1828–1834.

Blair-West, J.R., Denton, D.A., McKinley, M.J., Radden, B.G., Ramshaw, E.H., Wark, J.D. (1992). Behavioral and tissue response to severe phosphorous depletion in cattle. American Journal of Physiology, 263, R656-R663.

Blatt, A.D., Roe, L.S., Rolls, B.J. (2011). Hidden vegetables: an effective strategy to reduce energy intake and increase vegetable intake in adults. American Journal of Clinical Nutrition, 93, 756– 763.

Blundell, J.E., & Bellisle, F. (Eds). (2013). Satiation, satiety and the control of food intake. Oxford: Woodhead Publishing.

Booth, D.A. (2009). Learnt reduction in the size of a meal. Measurement of the sensory-gastric inhibition from conditioned satiety. Appetite, 52, 745-749.

Booth, D.A., & Thibault, L. (2000). Macronutrient-specific hungers and satieties and their neural bases, learnt from pre- and postingestional effects of eating particular foodstuffs. In H.-R. Berthoud, & R.J. Seeley, (Eds). Neural Control of Macronutrient Selection (pp. 61–91). Boca Raton: CRC Press.

Brand Miller, J.C., & Colagiuri, S. (1999). Evolutionary aspects of diet and insulin resistance. World Review of Nutrition and Dietetics, 84, 74–105.

Brandt, K. Leifert, C., Sanderson, R. & Seal, C.J. (2011). Agroecosystem management and nutritional quality of plant foods: The case of organic fruits and vegetables. Critical Reviews in Plant Sciences, 30, 177-197.

Bridges, P.S. (1995). Skeletal biology and behavior in ancient humans. Evolutionary Anthropology, 4, 112 – 120.

Brondel, L., Romer, M. Van Wymelbeke, V., Pineau, N., Jiang, T., Hanus, C., Rigaud, D. (2009). Variety enhances food intake in humans: Role of sensory-specific satiety. Physiology & Behavior, 97, 44–51.

Bryant, J.P., Chapin, F.S., & Klein, D.R. (1983). Carbon/nutrient balance of boreal plants in relation to vertebrate herbivory. Oikos, 40, 357-368.

Burritt, E.A. & Provenza, F.D. (1991). Ability of lambs to learn with a delay between food ingestion and consequences given meals containing novel and familiar foods. Applied Animal Behaviour Science, 32, 179-189.

Burritt, E.A. & Provenza, F.D. (1996). Amount of experience and prior illness affect the acquisition and persistence of conditioned food aversions in lambs. Applied Animal Behaviour Science, 48, 73-80.

Burritt, E.A. & Provenza, F.D. (1997). Effect of an unfamiliar location on the consumption of novel and familiar foods by sheep. Applied Animal Behaviour Science, 54, 317-325.

Burrows, G.E., & Tyrl, R.J. (2001). Toxic Plants of North America. Ames: Iowa State University Press.

Camin, F., Bontempo, L., Heinrich, K., Horacek, M., Kelly, S.D., Schlicht, C., Thomas, F., Monahan, F.J., Hoogewerff, J., Rossmann, A. (2007). Multi-element (H, C, N, S) stable isotope characteristics of lamb meat from different European regions. Analytical and Bio-Analytical Chemistry, 389, 309-320.

Carlson, B.A., Rothman, J.M., & Mitani, J.C. (2013). Diurnal variation in nutrients and chimpanzee foraging behavior. American Journal of Primatology, 75, 342-349.

Carpino, S., Home, J., Melilli, C., Licitra, G., Barbano, D.M., & Van Soest, P.J. (2004). Contribution of native pasture to the sensory properties of Ragusano cheese. Journal of Dairy Science, 87, 308-315.

Carpino, S., Mallia, S., La Terra, S., MeUIli, C., Licitra, G., Acree, T.E., Barbano, D.M., & Van Soest, P.J. (2004). Composition and aroma compounds of Ragusano cheese: Native pasture and total mixed rations. Journal of Dairy Science, 87, 816-830.

Catoni, C., Peters, A., & Schaefer, H.M. (2008). Life history trade-offs are influenced by the diversity, availability and interactions of dietary antioxidants. Animal Behaviour, 76, 1107-1119.

Chadwick, M.A., Vercoe, P.V., Williams, I.H., & Revell, D.K. (2009). Programming sheep production on saltbrush: adaptations of offspring from ewes that consumed high amounts of salt during pregnancy and early lactation. Animal Production Science, 49, 311-317.

Chapelot, D. (2013). Quantifying satiation and satiety. In: J.E. Blundell, & F. Bellisle, (Eds.) Satiation, satiety and the control of food intake, pp. 12-39.Woodhead Publishing. Oxford.

Chowdhury, R., Warnakula, S., Kunutsor, S., Crowe, F., Ward, H.A., Johnson, L., Franco, O.H., Butterworth, A.S., Forouhi, N.G., Thompson, S.G., Khaw, K.-T., Mozaffarian, D., Danesh, J., & Di Angelantonio, E. (2014). Association of dietary, circulating, and supplement fatty acids with coronary risk: a systematic review and meta-analysis. Annals of Internal Medicine, 160, 398-406.

Coates, K.P., Schemnitz, S.D., & Peters, J.T. (1991). Use of rodent middens as mineral licks by bighorn sheep. In: Bailey JA (ed.) Seventh biennial symposium northern wild sheep and goat council, pp. 206-209. Alberta: Alberta Fish and Wildlife.

Coley, P.D., Bryant, J.P., Chapin, F.S. III. (1985). Resource availability and plant antiherbivore defense. Science, 230, 895-899.

Cooper, S.D.B., Kyriazakis, I., & Oldham, J.D. (1994). The effect of late pregnancy on the diet selections made by ewes. Livestock Production Science, 40, 263-275.

Cooper, S.D.B., Kyriazakis I., & Nolan, J.V. (1995). Diet selection in sheep: the role of the rumen environment in the selection of a diet from two feeds that differ in their energy density. British Journal of Nutrition, 74, 39-54.

Cordain, L., Brand Miller, J.B., Eaton, S.B., & Mann, N. (2000a). Macronutrient estimations in hunter-gatherer diets. American Journal of Clinical Nutrition, 72, 1589–1590.

Cordain, L., Brand Miller, J., Eaton, S.B., Mann, N., Holt, S.H.A., & Speth, J.D. (2000b). Plant-animal subsistence ratios and macronutrient energy estimations in worldwide hunter-gatherer diets. American Journal of Clinical Nutrition 71, 682 – 692.

Cordain, L., Eaton, S.B., Brand Miller, J., Mann, N., Hill, K. (2002). The paradoxical nature of hunter-gatherer diets: meat-based, yet non-atherogenic. European Journal of Clinical Nutrition, 56, S42-S52.

Craig, W.J. Health-promoting properties of common herbs. (1999). American Journal of Clinical Nutrition, 70, 491S-499S.

Criqui, M.H. & Ringel, B.L. (1994). Does diet or alcohol explain the French paradox? Lancet, 344, 1719–1723.

Crozier, A., Clifford, M.N., & Ashihara, H. (Eds). (2006). Plant secondary metabolites: occurrence, structure and role in the human diet. Ames: Blackwell Publ.

Daley, C.A., Abbott, A., Doyle, P.S., Nader G.A., & Larson, A. (2010). A review of fatty acid profiles and antioxidant content in grass-fed and grain-fed beef. Nutrition Journal, 9:10 http://www.nutritionj.com/content/9/1/10.

Dangour, A.D., Allen, E., Elbourne, D., Fasey, N., Fletcher, A.E., Hardy, P., Holder, G.E., Knight, R., Letley, L., Richards, M., Uauy, R. (2010). Effect of 2-y n-3 long-chain polyunsaturated fatty acid supplementation on cognitive function in older people: a randomized, double-blind, controlled trial. American Journal of Clinical Nutrition, 91, 1725-1732.

Davis, C.M. (1928). Self-selection of a diet by newly weaned infants. American Journal Disabled Children, 36, 651-679.

Davis, C.M. (1939). Results of the self-selection of diets by young children. Canadian Medical Association Journal, 41, 257-261.

Davis, D.R. (2009). Declining fruit and vegetable nutrient composition: What is the evidence? Horticultural Science, 44:15-19.

Davis, D.R., Epp, M.D., & Riordan, H.D. (2004). Changes in USDA food composition data for 43 garden crops, 1950 to 1999. The Journal of the American College of Nutrition, 23, 669–682.

Davis, J.M., & Stamps, J.A. (2004). The effect of natal experience on habitat preferences. Trends in Ecology and Evolution, 19, 411-416.

Dearing, M.D., Foley, W.J., McLean, S. (2005). The influence of plant secondary metabolites on the nutritional ecology of herbivorous terrestrial vertebrates. Annual Review of Ecology Evolution and Systematics, 36, 169-189.

Del Rio, D., Rodriguez-Mateos, A., Spencer, J.P.E., Tognolini, M., Borges, G., & Crozier, A. (2013). Dietary (poly) phenolics in human health: structures, bioavailability, and evidence of protective effects against chronic diseases. Antioxidants & Redox Signaling, 18, 1818–1892.

Denton, D.A., Blair-West, J.R., McKinley, M.J., & Nelson, J.F. (1986). Physiological analysis of bone appetite (osteophagia), BioEssays, 4, 40-42.

de Castro, J.M. (2000). Macronutrient selection in free-feeding humans: evidence for long-term regulation. In H-R Berthoud & R.J. Seeley (Eds), Neural control of macronutrient selection, pp. 43–51. Boca Raton: CRC Press.

Depoortere, I. (2014) Taste receptors of the gut: emerging roles in health and disease. Gut, 63, 179-190.

Descalzo, A.M. & Sancho, A.M. (2008). A review of natural antioxidants and their effects on oxidative status, odor and quality of fresh beef produced in Argentina. Meat Science, 79, 423-436.

de Roode, J.C., Lefèvre, T., Hunter, M.D. (2013). Self-medication in animals. Science, 340, 150-151.

Diamond, J. (1999). Guns, germs, and steel: the fates of human societies. New York: W.W. Norton & Co.

Distel, R.A., & Provenza, F.D. (1991). Experience early in life affects voluntary intake of blackbrush by goats. Journal of Chemical Ecology, 17, 431-450.

Distel, R.A., Villalba, J.J., & Laborde, H.E. (1994). Effects of early experience on voluntary intake of low-quality roughage by sheep. Journal of Animal Science, 72, 1191-1195.

Drewnowski, A., & Gomez-Carneros, C. (2000). Bitter taste, phytonutrients, and the consumer: a review. American Journal of Clinical Nutrition, 72, 1424–35.

Drewnowski, A., & Specter, S.E. (2004). Poverty and obesity: the role of energy density and energy costs. American Journal of Clinical Nutrition, 79, 6–16.

Drewnowski, A. and Darmon, N. (2005a). The economics of obesity: Dietary energy density and energy cost. American Journal of Clinical Nutrition, 82, 265S–273S.

Drewnowski, A. and Darmon, N. (2005b). Food choices and diet costs: An economic analysis. Journal of Nutrition, 135, 900–904.

Drewnowski, A., Henderson, S. A., Shore, A. B., Fischler, C., Preziosi, P. & Herzberg, S. (1996). Diet quality and dietary diversity in France: implications for the French paradox. Journal of the American Dietetic Association, 96, 663–669.

Dziba, L.E., & Provenza, F.D. (2007). Dietary monoterpene concentrations influence feeding patterns of lambs. Applied Animal Behaviour Science, 109, 49-57.

Dziba, L.E., Hall, J.O., & Provenza, F.D. (2006). Feeding behavior of lambs in relation to kinetics of 1,8-cineole dosed intravenously or into the rumen. Journal of Chemical Ecology, 32, 391-408.

Early, D., Provenza, F.D. (1998). Food flavor and nutritional characteristics alter dynamics of food preference in lambs. Journal of Animal Science, 76, 728-734.

Ebbeling, C.B., Swain, J.F., Feldman, H.A., Wong, W.W., Hachey, D.L., Garcia-Lago, E., & Ludwig, D.S. (2012). Effects of dietary composition on energy expenditure during weight-loss maintenance. Journal of the American Medical Association, 307, 2627–34.

Egan, A.R., Rogers, Q.R. (1978). Amino acid imbalance in ruminant lambs. Australian Journal of Agricultural Research, 29, 1263-1279.

Ejsmond, M.J, & Provenza, F.D. (2015). Is doping of cognitive performance by cholinergic plant chemicals an anti-herbivore adaptation? A step toward resolving the drug-reward paradox. PlosOne, submitted.

Ello-Martin, J.A., Roe, L.S., Ledikwe, J.H., Beach, A.M., & Rolls, B.J. (2007). Dietary energy density in the treatment of obesity: a year- long trial comparing two weight- loss diets. American Journal of Clinical Nutrition, 85, 1465– 1477.

Emmick, D.L. (2007). Foraging behavior of dairy cattle on pastures. PhD Thesis. Utah State University. Logan, UT.

Epstein, L.H., Carr, K.A., Cavanaugh, M.D., Paluch, R.A., Bouton, M.E. (2011). Long-term habituation to food in obese and nonobese women. American Journal of Clinical Nutrition, 94, 371–376.

Fardet, A. (2010). New hypotheses for the health-protective mechanisms of whole-grain cereals: what is beyond fibre? Nutrition Research Review, 23, 65-134.

Feng, H., Kang, C., Dickman, J.R., Koenig, R., Awoyinka, I., & Zhang Y., Ji L.L. (2013). Training induced mitochondrial adaptation: role of peroxisome proliferator-activated receptor gamma coactivator-1alpha, nuclear factor-kappaB and beta-blockade. Experimental Physiology, 98, 784-795.

Fogelholm, M., Anderssen, S., Gunnarsdottir, I., Lahti-Koski, M. (2012). Dietary macronutrients and food consumption as determinants of long-term weight change in adult populations: a systematic literature review. Food & Nutrition Research, 56, (E publication DOI: 10.3402/fnr.v56i0.19103).

Foley, W.J., & McArthur, C. (1994). The effects and costs of allelochemicals for mammalian herbivores: an ecological perspective. In D.J. Chivers & P. Langer (Eds.) The digestive system in mammals: food, form and function, pp. 370-391. Cambridge: Cambridge University Press.

Foley, W.J., McLean, S. & Cork, S.J. (1995). Consequences of biotransformation of plant secondary metabolites on acid-base metabolism in mammals - A final common pathway? Journal of Chemical Ecology, 21, 721-743.

Foley, W.J., Iason, G.R., McArthur, C. (1999). Role of plant secondary metabolites in the nutritional ecology of mammalian herbivores: How far have we come in 25 years? In H.G. Jung & G.C. Fahey Jr. (Eds.) Nutritional ecology of herbivores, pp. 130-209. Proceedings of the Fifth International Symposium on the Nutrition of Herbivores. Champaign: American Society of Animal Science.

Forbes, J.M. (2007). A personal view of how ruminant animals control their intake and choice of food: minimal total discomfort. Nutrition Research Reviews 20, 132-146.

Forsythe, C.E., Phinney, S.D., Fernandez, M.L., Quann, E.E., Wood, R.J., Bibus, D.M., Kraemer, W.J., Feinman, R.D., & Volek, J.S. (2008). Comparison of low fat and low carbohydrate diets on circulating fatty acid composition and markers of inflammation. Lipids, 43, 65-77.

Francis, S.A. (2003). Investigating the role of carbohydrates in the dietary choices of ruminants with an emphasis on dairy cows. PhD. Thesis, Univ. Melbourne.

Freeland, W.J., & Janzen, D.H. (1994). Strategies in herbivory by mammals: The role of plant secondary compounds. American Naturalist, 108, 269-286.

Fumess, R.W. (1988). Predation on ground-nesting seabirds by island populations of red deer Cervus elaphus and sheep Ovis. Journal of Zoology, London, 216, 565-573.

Furness, J.B., Rivera, L.R., Cho, H-J., Bravo, D.M., Callaghan, B. (2013). The gut as a sensory organ. Nature Reviews Gastroenterology & Hepatology, 10, 729–740.

Galef, B.G. (1996). Food selection: Problems in understanding how we choose foods to eat. Neuroscience & Biobehavioral Reviews, 20, 67–73.

Garcia, O.P., Long, K.Z., & Rosado, J.L. (2009). Impact of micronutrient deficiencies on obesity. Nutrition Reviews, 67, 559-572.

Ginane, C., Bonnet, M., Revell, D.K. (2015). Feeding behaviour is a consequence of interactions between a reward system and the regulation of metabolic homeostasis. Animal Production Science, 55, 247-260.

Glasser, T.A., Ungar, E.D., Landau, S.Y., Perevolotsky, A., Muklada, H., & Walker, J.W. (2009). Breed and maternal effects on the intake of tannin-rich browse by juvenile goats (Capra hircus). Applied Animal Behaviour Science, 119, 71-77.

Gluckman, P.D., Hanson, M.A., & Spencer, H.G. (2005). Predictive adaptive responses and human evolution. Trends in Ecology and Evolution, 20, 527-533.

Gluckman, P.D., Hanson, M.A., Cooper, C., & Thornburg, K.L. (2008). Effect of in utero and early-life conditions on adult health and disease. New England Journal of Medicine, 359, 61-73.

Goff, S.A., & Klee, H.J. (2006). Plant volatile compounds: sensory cues for health and nutritional value? Science, 311, 815–819.

Gonzalez-Bulnes, A., Ovilo, C., & Astiz, S. (2014). Transgenerational inheritance in the offspring of pregnant women with metabolic syndrome. Current Pharmaceutical Biotechnology, 15, 13-23.

Green, G.C., Elwin, R.L., Mottershead, B.E., & Lynch, J.J. (1984). Long-term effects of early experience to supplementary feeding in sheep. Proceedings of the Australian Society of Animal Production, 15, 373-375.

Gregorini, P. (2012). Diurnal grazing pattern: its physiological basis and strategic management. Animal Production Science, 52, 416-430.

Gregorini, P., Villalba, J.J., Provenza, F.D., Beukes, P.C., & Forbes, J.M. (2015). Modelling preference and diet selection patterns by grazing ruminants. Animal Production Science, 55, 360–375.

Grovum, W.L. (1988). Appetite, palatability and control of feed intake. In D.C. Church [Ed.], pp. 202-216. The ruminant animal. Prentice Hall: Englewood Cliffs.

Gruppo Italiano per lo Studio della Sopravvivenza nell'Infarto Miocardico. (1999). Dietary supplementation with n-3 polyunsaturated fatty acids and vitamin E after myocardial infarction: results of the GISSI-Prevenzione trial. Lancet, 354, 447-455.

Hathcock, J.N. (1997). Vitamins and minerals: efficacy and safety. American Journal of Clinical Nutrition, 66, 427–37.

Havermans, R.C. (2009). Increasing children’s liking and intake of vegetables through experiential learning. In R.R. Watson & V.R. Preedy (Eds), Bioactive foods in promoting health, pp. 273-283. Oxford: Academic Press. 2009;

Hawley, J.A., Burke, L.M., Phillips, S.M., & Spriet, L.L. (2011). Nutritional modulation of training induced skeletal muscle adaptations. Journal of Applied Physiology, 110, 834-845.

Hennink, S.D., & Maljaars, P.W.J. (2013). Fats and satiety. In J.E. Blundell & F Bellisle (Eds.) Satiation, satiety and the control of food intake, pp. 143-165. Oxford: Woodhead Publishing.

Hetherington, M.M. (1996). Sensory-specific satiety and its importance in meal termination. Neuroscience & Biobehavioral Reviews, 20, 113–117.

Hill, J., Chapman, D.F., Cosgrove, G.P., & Parsons, A.J. (2009). Do ruminants alter their preference for pasture species in response to the synchronization of delivery and release of nutrients? Rangeland Ecology and Management, 62, 418–427.

Hills, J., Kyriazakis, I., Nolan, J.V., Hinch, G.N., & Lynch, J.J. (1999). Conditioned feeding responses in sheep to flavoured foods associated with sulphur doses. Animal Science, 69, 313-325.

Hollenbeck, C., & Reaven, G.M. (1987). Variations in insulin-stimulated glucose uptake in healthy individuals with normal glucose tolerance. The Journal of Clinical Endocrinology and Metabolism, 64, 1169-1173.

Holliday, R.J., & Helfter, J. (2014). A Holistic Vet’s Prescription for a Healthy Herd: A Guide to Livestock Nutrition, Free-choice Minerals, and Holistic Cattle Care. Austin: Acres U.S.A.

Holston, W.E. (1963). The diet of the mountain men. California Historical Society Quarterly, 42, 301-309.

Hotamisligil, G.S. (2006). Inflammation and metabolic disorders. Nature, 444, 860-867.

Howery, L.D., Provenza, F.D., Banner, R.E., & Scott C.B. (1996). Differences in home range and habitat use among individuals in a cattle herd. Applied Animal Behaviour Science, 49, 305-320.

Howery, L.D., Provenza, F.D., Banner, R.E., & Scott C.B. (1998). Social and environmental factors influence cattle distribution on rangeland. Applied Animal Behaviour Science, 55, 231-244.

Howitz, K.T., Sinclair, D.A. (2008). Xenohormesis: Sensing the chemical cues of other species. Cell, 133:387-391.

Hu, F.B., Rimm, E.B., Stampfer, M.J., Ascherio, A., Spiegelman, D., & Willett, W.C. (2000). Prospective study of major dietary patterns and risk of coronary heart disease in men. American Journal of Clinical Nutrition, 72, 912–921.

Huffman, M.A. (2011). Primate Self-Medication. In C. Campbell, A. Fuentes, K. MacKinnon, M. Panger, & S. Bearder (Eds.), Primates in perspective (2nd Edition), pp. 563-573. Oxford: University of Oxford Press.

Hungate, R.E. (1966). The rumen and its microbes. New York: Academic Press.

Illius, A.W., & Jessop, N.S. (1995). Modeling metabolic costs of allelochemical ingestion by foraging herbivores. Journal of Chemical Ecology, 21, 693-719.

Illius, A.W., & Jessop, N.S. (1996). Metabolic constraints on voluntary intake in ruminants. Journal of Animal Science, 74, 3052-3062.

Iozzo, P., Holmes, M., Schmidt, M.V., Cirulli, F., Guzzardi, M.A., Berry, A., Balsevich, G., Andreassi, M.G., Wesselink, J.-J., Liistro, T., Gómez-Puertas, P., Eriksson, J.G., Seckl, J. (2014). Developmental ORIgins of healthy and unhealthy AgeiNg: The role of maternal obesity – Introduction to DORIAN. Obesity Facts, 7, 130–151

Jacobs, D.R., & Tapsell, L.C. (2007). Food, not nutrients, is the fundamental unit in nutrition. Nutrition Review, 65, 439-450.

Jakobsen, M.U., O’Reilly, E.J., Heitmann, B.L., Pereira, M.A., Balter, K., Fraser, G.E., Goldbourt, U., Hallmans, G., Knekt, P., Liu, S., Pietinen, P., Spiegelman, D., Stevens, J., Virtamo, J., Willett ,W.C., Ascherio, A. (2009). Major types of dietary fat and risk of coronary heart disease: a pooled analysis of 11 cohort studies. American Journal of Clinical Nutrition, 89, 1425–1432.

Jakubowicz, D., Wainstein, J., Ahrén, B., Bar-Dayan, Y., Landau, Z., Rabinovitz, H.R., Froy, O. (2015). High-energy breakfast with low-energy dinner decreases overall daily hyperglycaemia in type 2 diabetic patients: a randomised clinical trial. Diabetologia, 58, 912–919.

Janssen, S., & Depoortere, I. (2013). Nutrient sensing in the gut: new roads to therapeutics? Trends in Endocrinology and Metabolism, 24, 92-100.

Jenkins, D.J.A., Kendall, C.W.C., Marchie, A., Jenkins, A.L., Augustin, L.S.A., Ludwig, D.S., Barnard, N.D., & Anderson, J.W. (2003). Type 2 diabetes and the vegetarian diet. American Journal of Clinical Nutrition, 78, 610S–616S.

Johns, T. (1990). The origins of human diet & medicine. Tucson: The University of Arizona Press.

Johnson, G.H., & Fritsche, K. (2012). Effect of dietary linoleic acid on markers of inflammation in healthy persons: a systematic review of randomized controlled trials. Journal of the Academy of Nutrition and Dietetics, 112, 1029-1041.

Johnston, B.C., Kanters, S., Bandayrel, K., Wu, P., Naji, F., Siemieniuk, R.A., Ball, G.D.C. Busse, J.W., Thorlund, K., Guyatt, G., Jansen, J.P., & Mills, E.J. (2014). Comparison of weight loss among named diet programs in overweight and obese adults: a meta-analysis. Journal of the American Medical Association, 312, 923-933.

Johnstone, A. (2013). Protein and satiety. In J.E. Blundell & F Bellisle (Eds.) Satiation, satiety and the control of food intake, pp. 128-142. Oxford: Woodhead Publishing.

Juhnke, J., Miller, J., Hall, J.O., Provenza, F.D., & Villalba, J.J. (2012). Preference for condensed tannins by sheep in response to challenge infection with Haemonchus contortus: Veterinary Parasitology, 188, 104-114.

Junker, Y., Zeissig, S., Kim, S.J., Barisani, D., Wieser, H., Leffler, D.A., Zevallos, V., Libermann, T.A., Dillon, S., Freitag, T.L., Kelly, C.P., & Schuppan, D. (2012). Wheat amylase trypsin inhibitors drive intestinal inflammation via activation of toll-like receptor 4. Journal of Experimental Medicine, 209, 2395–2408.

Kang, C., O'Moore, K.M., Dickman, J.R., & Ji, L.L. (2009). Exercise activation of muscle peroxisome proliferator-activated receptor-gamma coactivator-1alpha signaling is redoxsensitive. Free Radical Biology and Medicine, 47, 1394-1400.

Katan, M. (2014) Fat under fire: new findings or shaky science? Nutrition Action Healthletter May 3-7.

Khoury, C.K., Bjorkmanc, A.D., Dempewolf, H., Ramirez-Villegas, J., Guarino, L., Jarvis, A., Rieseberg, L.H., & Struik, P.C. (2014). Increasing homogeneity in global food supplies and the implications for food security. Proceedings of the National Academy of Sciences, 111, 4001–4006.

Klee, H.J., & Tieman, D.M. (2013). Genetic challenges of flavor improvement in tomato. Cell, 29, 257-262.

Koh-Banerjee, P., & Rimm, E.B. (2003). Whole grain consumption and weight gain: a review of the epidemiological evidence, potential mechanisms and opportunities for future research. Proceedings of the Nutrition Society, 62, 25–29.

Koh-Banerjee, P., Franz, M., Sampson, L., Liu, S., Jacobs, D.R. Jr., Spiegelman, D., Willett, W., & Rimm, E. (2004). Changes in whole-grain, bran, and cereal fiber consumption in relation to 8-y weight gain among men. American Journal of Clinical Nutrition, 80, 1237–1245.

Kral, J.G., Biron, S., Simard, S., Hould, F.-S., Lebel, S., Marceau, S., Marceau, P. (2006). Large maternal weight loss from obesity surgery prevents transmission of obesity to children who were followed for 2 to 18 years. Pediatrics, 118, 1644-1649.

Kromhout, D., Giltay, E.J., & Geleijnse, J.M. (2010). n–3 fatty acids and cardiovascular events after myocardial infarction. New England Journal of Medicine, 363, 2015-2026.

Kyriazakis, I., & Oldham, J.D. (1993). Diet selection in sheep: The ability of growing lambs to select a diet that meets their crude protein (nitrogen x 6.25) requirements. British Journal of Nutrition, 69, 617-629.

Kyriazakis, I., & Oldham, J.D. (1997). Food intake and diet selection of sheep: The effect of manipulating the rates of digestion of carbohydrates and protein of the foods offered as a choice. British Journal of Nutrition, 77, 243-254.

Kyriazakis, I., Oldham, J.D., Coop, R.L.F., & Jackson, F. (1994). The effect of subclinical intestinal nematode infection on the diet selection of growing sheep. British Journal of Nutrition, 72, 665-677.

Lancy, D.F. (2008). The anthropology of childhood: cherubs, chattel, changelings. Cambridge: Cambridge University Press.

Larsen, T.M., Dalskov, S.M., van Baak, M., Jebb, S.A., Papadaki, A., Pfeiffer, A.F., Martinez, J.A., Handjieva-Darlenska, T., Kunesova, M., & Pihlsgard, M., et al. (2010). Diets with high or low protein content and glycemic index for weight-loss maintenance. New England Journal of Medicine, 363, 2102–2113.

Launchbaugh, K.L., & Provenza, F.D. (1993). Can plants practice mimicry to avoid grazing by mammalian herbivores? Oikos 66, 501-504.

Lemmens, S., Schoffelen, P., Wouters, L., Born, J., Martens, M., Rutters, F., Westerterp-Plantenga, M. (2009). Eating what you like induces a stronger decrease of ‘wanting’ to eat. Physiology & Behavior, 98, 318–325.

Levin, B.E. (2000). The obesity epidemic: metabolic imprinting on genetically susceptible neural circuits. Obesity Research, 8, 342-347.

Levin, B.E., & Govek, E. (1998). Gestational obesity accentuates obesity in obesity prone progeny. American Journal of Physiology, 275, R1374-1379.

Liebig, J.V. (1840). Die organische Chemie in ihrer Anwendung auf Agri- cultur und Physiologie (Organic chemistry in its applications to agriculture and physiology). Friedrich Vieweg und. Braunschweig, Germany: Sohn Publ. Co.

Lind, J. (1753). A Treatise on the scurvy. London: A. Millar.

Liu, S., Willett, W.C., Manson, J.E., Hu, F.B., Rosner, B., & Colditz, G. (2003). Relation between changes in intakes of dietary fiber and grain products and changes in weight and development of obesity among middle-aged women. American Journal of Clinical Nutrition, 78, 920–927.

Lev-Ran, A. (2001). Human obesity: an evolutionary approach to understanding our bulging waistline. Diabetes/Metabolism Research and Reviews, 17, 347–362.

Lobley, G.E., & Milano, G.D. (1997). Regulation of hepatic nitrogen metabolism in ruminants. Proceedings of the Nutrition Society, 57, 547-563.

Ludwig, D.S. (2002). The glycemic index: physiological mechanisms relating to obesity, diabetes, and cardiovascular disease. Journal of the American Medical Association, 287, 2414–2423.

Ludwig, D.S. (2011). Technology, diet, and the burden of chronic disease. Journal of the American Medical Association, 305, 1352–1353.

Ludwig, D.S., & Friedman, M.I. (2014). Increasing Adiposity: Consequence or Cause of Overeating? Journal of the American Medical Association, 311, 2167-2168.

Lutz, J. (1984). Calcium balance and acid-base status of women as affected by increased protein intake and by sodium bicarbonate ingestion. American Journal of Clinical Nutrition, 39, 281-288.

Lyman, T.D., Provenza, F.D., Villalba, J.J., & Wiedmeier, R.D. (2011). Cattle preferences differ when endophyte-infected tall fescue, birdsfoot trefoil, and alfalfa are grazed in difference sequences. Journal of Animal Science, 89, 1131-1137.

Lyman, T.D., Provenza, F.D., Villalba, J.J., & Wiedmeier, R.D. (2012). Phytochemical complementarities among endophyte-infected tall fescue, reed canarygrass, birdsfoot trefoil, and alfalfa affect cattle foraging. Animal, 6, 676–682.

Martin-Gronert, M.S., & Ozanne, S.E. (2005). Programming of appetite and type 2 diabetes. Early Human Development, 81, 981-988.

Maslowski, K.M., Vieira, A.T., Ng, A., Kranich, J., Sierro, F., Yu, D., Schilter, H.C., Rolph, M.S., Mackay, F., Artis, D., Xavier, R.J., Teixeira, M.M., & Mackay, C.R. (2009) Regulation of inflammatory responses by gut microbiota and chemoattractant receptor GPR43. Nature, 461, 1282-1286.

Mattson, M., & Calabrese, E. (2008). Best in small doses. New Scientist, 2672, 36-39.

Maughan, C., Tansawat, R., Cornforth, D., Ward, R., & Martini S. (2011). Development of a beef flavor lexicon and its application to compare the flavor profile and consumer acceptance of rib steaks from grass- or grain-fed cattle. Meat Science, 90, 116-121.

Maughan, B., Provenza, F.D., Tansawat, R., Maughan, C., Martini, S., Ward, R., Clemensen, A., Cornforth, D., & Villalba, J.J. (2014). Importance of grass-legume choices on cattle grazing behavior, performance and meat characteristics. Journal of Animal Science, 92, 2309-2324.

Mayer, A.-M. (1997). Historical changes in the mineral content of fruits and vegetables. British Food Journal, 99, 207–211.

McCarron, D.A., Geerling, J.C., Kazaks, A.G., & Stern, J.S. (2009). Can Dietary Sodium Intake Be Modified by Public Policy? Clinical Journal of the American Society of Nephrology, 4, 1878–1882.

McMillen, I.C., & Robinson, J.S. (2005). Developmental origins of the metabolic syndrome: prediction, plasticity, and programming. Physiological Reviews, 85, 571-633.

Macpherson, H., Pipingas, A., & Pase, M.P. (2013). Multivitamin-multimineral supplementation and mortality: a meta-analysis of randomized controlled trials. American Journal of Clinical Nutrition, 97, 437–44.

Meengs, J.S., Row, L.S., & Rolls, B.J. (2012). Vegetable variety: an effective strategy to increase vegetable intake in adults. Journal of the Academy of Nutrition and Dietetics, 112, 1211–1215.

Mennella, J., & Beauchamp, G.K. (2010). The role of early life experience in flavor perception and delight. In L. Dube, A. Bechara, A. Dagher, A. Drewnowski, J. Lebel, P. James, R.Y. Yada, & M.C. Laflamme-Sanders (Eds.) Obesity prevention: the role of brain and society on individual behavior, pp. 203-217. San Diego: Academic Press.

Meuret, M. (1996). Organizing a grazing route to motivate intake on coarse resources. Annales de Zootechnie, 45, 87-88.

Meuret, M., & Provenza, F.D. (2014). The art & science of shepherding: tapping the wisdom of French herders. Austin: Acres U.S.A.

Meuret, M., & Provenza, F.D. (2015a). How French shepherds create meal sequences to stimulate intake and optimise use of forage diversity on rangeland. Animal Production Science, 55, 309-318.

Meuret, M., & Provenza, F.D. (2015b). When art and science meet: Integrating knowledge of French herders with science of foraging behavior. Rangeland Ecology & Management, 68, 1–17.

Miller, E.R. III, Pastor-Barriuso, R., Dalal, D., Riemersma, R.A., Appel, L.J., & Guallar, E. (2005). Meta-analysis: High-dosage vitamin E supplementation may increase all-cause mortality. Annals of Internal Medicine, 142, 37–46.

Milton, K. (2003). The critical role played by animal source foods in human (homo) evolution. Journal of Nutrition, 133, 3886S–3892S.

Min, B.R., & Hart, S.P. (2003). Tannins for suppression of internal parasites. Journal of Animal Science, 81, E102-E109.

Min, B.R., Fernandez, J.M., Barry, T.N., McNabb, W.C., & Kemp, P.D. (2001). The effect of condensed tannins in Lotus corniculatus upon reproductive efficiency and wool production in ewes during autumn. Animal Feed Science and Technology, 92, 185-202.

Min, B.R., Pomroy, W.E., Hart, S.P., & Sahlu T. (2004). The effect of short-term consumption of a forage containing condensed tannins on gastro-intestinal nematode parasite infections in grazing wether goats. Small Ruminant Research, 51:279-283.

Møller, P. (2013). Gastrophysics in the brain and body. Flavour, 2, 8.

Møller, P. (2015). Taste and appetite. Flavour, 4, 4.

Moore, B., Wiggins, N., Marsh, K., Dearing, D, & Foley, W. (2015). Translating physiological signals to behavioural changes in feeding behaviour in mammals and the future effect of global climate change. Animal Production Science, 55, 272-283.

Mote, T., Villalba, J.J., & Provenza, F.D. (2008). Foraging sequence influences the ability of lambs to consume foods containing tannins and terpenes. Applied Animal Behaviour Science, 113, 57-68.

Mowat, F. (2005). People of the Deer. New York: Carroll & Graf Publishers.

Mozaffarian, D., Hao, T., Rimm, E.B., Willett, W.C., & Hu, F.B. (2011). Changes in diet and lifestyle and long-term weight gain in women and men. New England Journal of Medicine, 364, 2392–2404.

Muhlbauer, R.C., Lozano, A., & Reinli, A. (2002). Onion and a mixture of vegetables, salads, and herbs affect bone resorption in the rat by a mechanism independent of their base excess. Journal of Bone and Mineral Research, 17, 1230–6.

Muhlbauer, R.C., Lozano, A., Palacio, S., Reinli, A. & Felix, R. (2003). Common herbs, essential oils, and monoterpenes potently modulate bone metabolism. Bone, 32, 372–80.

Mulholland, C.A., & Benford, D.J. (2007). What is known about the safety of multivitamin-multimineral supplements for the generally healthy population? Theoretical basis for harm. American Journal of Clinical Nutrition, 85, 318S–22S.

Nabhan, G.P. (2004). Why some like it hot: foods, genes, and cultural diversity. Washington D.C.: Island Press.

Netter, P. (1996). Health and pleasure. In D.M. Warburton & N. Sherwood [Eds.], Pleasure and quality of life, pp. 81–89. Chichester, United Kingdom: John Wiley.

Niezen, J.H., Charleston, W.A.G., Robertson, H.A., Shelton, D., Waghorn, G.C., Green, R. (2002). The effect of feeding Sulla (Hedysarum coronarium) or lucerne (Medicago sativa) on lamb parasite burdens and development of immunity to gastrointestinal nematodes. Veterinary Parasitology, 105, 229-245.

Nolte, D.L., & Provenza, F.D. (1992). Food preferences in lambs after exposure to flavors in milk. Applied Animal Behaviour Science, 32, 381-389.

Nolte, D.L., Provenza, F.D., Callan, R., & Panter, K.E. 1992. Garlic in the ovine fetal environment. Physiology & Behavior, 52, 1091-1093.

Norris, V., Molina, F., Gewirtzc, A.T. (2013). Hypothesis: bacteria control host appetites. Journal of Bacteriology, 195, 411–416.

O’Brien, J.S., & Benson, A.A. (1964). Isolation and fatty acid composition of the plant sulfolipid and galactolipids. Journal of Lipid Research, 5, 432-436.

O’Keefe, J.H., & Bell, D.S. (2007). Postprandial hyperglycemia/hyperlipidemia (postprandial dysmetabolism) is a cardiovascular risk factor. American Journal Cardiology, 100, 899 –904.

Ophuls, W. (2012). Immoderate greatness: why civilizations fail. North Charleston: CreateSpace Independent Publishing Platform.

Owens, J., Provenza, F.D., Wiedmeier R.D., & Villalba, J.J. (2012). Supplementing endophyte-infected tall fescue or reed canarygrass with alfalfa or birdsfoot trefoil increases forage intake and digestibility by sheep. Journal of Science of Food and Agriculture, 92, 987–992.

Pan, A., Sun, Q., Bernstein, A.M., Schulze, M.B., Manson, J.E., Stampfer, M.J., Willett, W.C., & Hu, F.B. (2012) Red meat consumption and mortality: results from 2 prospective cohort studies. Archives of Internal Medicine, 172, 555-563.

Parsons, A.J., Newman, J.A., Penning, P.D., Harvey, A. & Orr, R.J. (1994). Diet preference of sheep: effect of recent diet, physiological state and species abundance. Journal of Animal Ecology, 63, 465-478.

Patin, D.E., Quintana-Murci, L. (2008). Demeter’s legacy: rapid changes to our genome imposed by diet. Trends in Ecology and Evolution, 23, 56-59.

Paulsen, G., Cumming, K.T., Holden, G., Hallén, J., Rønnestad, B.R., Sveen, O., Skaug, A., Paur, I., Bastani, N.E., Østgaard, H.N., Buer, C., Midttun, M., Freuchen, F., Wiig, H., Ulseth, E.T., Garthe, I., Blomhoff, R., Benestad, H.B., & Raastad, T. (2014). Vitamin C and E supplementation hampers cellular adaptation to endurance training in humans: a double-blind randomized controlled trial. The Journal of Physiology (In Press) DOI: 10.1113/jphysiol.2013.267419.

Pelchat, M.L., Johnson, A., Chan, R., Valdez, V., Ragland, J.D. (2004). Images of desire: food-craving activation during fMRI. NeuroImage, 23, 1486–1493.

Perry, G.H., Dominy, N.J., Claw, K.G., Lee, A.S., Fiegler, H., Redon, R., Werner, J., Villanea, F.A., Mountain, J.L., Misra, R., Carter, N.P., Lee, C., Stone, A.C.. (2007). Diet and evolution of human amylase gene copy number variation. Nature Genetics, 39, 1256-1260.

Petersen, C.A., Villalba, J.J., Provenza, F.D. (2014). Influence of experience on cattle browsing sagebrush and its impacts on plant community structure. Rangeland Ecology & Management, 67, 78–87.

Pfister, J.A., Provenza, F.D., Manners, G.D., Gardner, D.R., Ralphs, M.H. (1997). Tall larkspur ingestion: Can cattle regulate intake below toxic levels? Journal of Chemical Ecology, 23, 759-777.

Phy, T.S., & Provenza, F.D. (1998). Sheep fed grain prefer foods and solutions that attenuate acidosis. Journal of Animal Science, 76, 954-960.

Pinheiro Machado Filho, L.C., Martins D’Ávila, L., da Silva Kazama, D.C., Bento, L.L., Kuhnen, S. (2014). How sustainable is grain supplementation of grazing dairy cows on family farms in the south of Brazil? Animal 4, 463-475.

Pliner, P., & Stallberg-White, C. (2000). ‘Pass the ketchup, please’: Familiar flavors increase children’s willingness to taste novel foods. Appetite, 34, 95–103.

Plagemann, A. (2006). Perinatal nutrition and hormone-dependent programming of food intake. Hormone Research, 65, 83-89.

Popkin, B.M., Adair, L.S., & Ng, S.W. (2012). NOW AND THEN: The global nutrition transition: the pandemic of obesity in developing countries. Nutrition Reviews, 70, 3-21.

Poppitt, S.D. (2013). Carbohydrates and satiety. In J.E. Blundell & F Bellisle (Eds.) Satiation, satiety and the control of food intake, pp. 166-181. Oxford: Woodhead Publishing.

Priolo, A., Vasta, V., Fasone, V., Lanza, C.M., Scerra, M., Biondi, L., Bella, M., & Whittington, F.M. (2009). Meat odour and flavour and indoles concentration in ruminal fluid and adipose tissue of lambs fed green herbage or concentrates with or without tannins. Animal, 3, 454–460.

Provenza, F.D. (1977). Biological manipulation of blackbrush (Coleogyne ramosissima Torr.) by browsing with goats. Thesis, Utah State Univ., Logan Utah.

Provenza, F.D. (1995). Postingestive feedback as an elementary determinant of food preference and intake in ruminants. Journal of Range Management, 48, 2-17.

Provenza, F.D. (1996). Acquired aversions as the basis for varied diets of ruminants foraging on rangelands. Journal of Animal Science, 74, 2010-2020.

Provenza, F.D. (1997). Feeding behavior of animals in response to plant toxicants. In J.P.F. D'Mello (Ed.), CRC handbook of plant and fungal toxicants pp. 231-242. Boca Raton: CRC Press Inc.

Provenza, F.D. (2003). Foraging Behavior: Managing to Survive in a World of Change. Logan: Utah State University.

Provenza, F.D. (2008). What does it mean to be locally adapted and who cares anyway? Journal of Animal Science, 86, E271-E284.

Provenza, F.D., & Balph, D.F. (1990). Applicability of five diet-selection models to various foraging challenges ruminants encounters. In: R.N. Hughes [Ed.]. Behavioural Mechanisms of Food Selection. pp. 423-459. NATO ASI Series G: Ecological Sciences, Vol. 20. Heidelberg: Springer-Verlag, Berlin.

Provenza, F.D., & Cincotta, R.P. (1993). Foraging as a self-organizational learning process: accepting adaptability at the expense of predictability. In: R.N. Hughes (Ed.), Diet selection. pp. 78-101. London: Blackwell Sci. Publ. Ltd.

Provenza, F.D., & Villalba, J.J. (2006). Foraging in domestic vertebrates: linking the internal and external milieu. In V.L. Bels (Ed.), Feeding in domestic vertebrates: from structure to function pp. 210-240. Oxfordshire, UK: CABI Publ.

Provenza, F.D., & Villalba, J.J. (2010). The role of natural plant products in modulating the immune system: An adaptable approach for combating disease in grazing animals. Small Ruminant Research, 89, 131-139.

Provenza, F.D., Pfister, J.A., & Cheney, C.D. (1992). Mechanisms of learning in diet selection with reference to phytotoxicosis in herbivores. Journal of Range Management, 45, 36-45.

Provenza, F.D., Lynch, J.J. & Nolan, J.V. (1993). The relative importance of mother and toxicosis in the selection of foods by lambs. Journal of Chemical Ecology, 19, 313-323.

Provenza, F.D., Burritt, E.A., Clausen, T.P., Bryant, J.P., Reichardt, P.B., & Distel, R.A. (1990). Conditioned flavor aversion: a mechanism for goats to avoid condensed tannins in blackbrush. American Naturalist, 136, 810-828.

Provenza, F.D., Lynch, J.J., Burritt, E.A., & Scott, C.B. (1994). How goats learn to distinguish between novel foods that differ in postingestive consequences. Journal of Chemical Ecology, 20, 609-624.

Provenza, F.D., Ortega-Reyes, L., Scott, C.B., Lynch, J.J., & Burritt, E.A. (1994). Antiemetic drugs attenuate food aversions in sheep. Journal of Animal Science, 72, 1989-1994.

Provenza, F.D., Burritt, E.A., Perevolotsky, A., & Silanikove, N. (2000). Self-regulation of intake of polyethylene glycol by sheep fed diets varying in tannin concentrations. Journal of Animal Science, 78, 1206-1212.

Provenza, F.D., Villalba, J.J., Dziba, L.E., Atwood, S.B., & Banner, R.E. (2003). Linking herbivore experience, varied diets, and plant biochemical diversity. Small Ruminant Research, 49, 257-274.

Provenza, F.D., Villalba, J.J., Haskell, J.H., MacAdam, J.A., Griggs, T.C., & Wiedmeier, R.D. (2007). The value to herbivores of plant physical and chemical diversity in time and space. Crop Science, 47, 382-398.

Putnam, S.E., Scutt, A.M., Bicknell, K., Priestley, C.M., Williamson, E.M. (2007). Natural products as alternative treatments for metabolic bone disorders and for maintenance of bone health. Phytotherapy Research, 21, 99-112.

Quinn, J.F., Raman, R., Thomas, R.G., Yurko-Mauro, K., Nelson, E.B., Van Dyck, C., Galvin, J.E., Emond, J., Jack, C.R. Jr., Weiner, M., Shinto, L., & Aisen, P.S. (2010). Docosahexaenoic acid supplementation and cognitive decline in Alzheimer disease: a randomized trial. Journal of the American Medical Association, 304, 1903-1911.

Ralphs, M.H., & Provenza, F.D. (1999). Conditioned food aversions: principles and practices, with special reference to social facilitation. Proceedings of the Nutrition Society, 58, 813-820.

Ramakrishnan, U. (2002). Prevalence of micronutrient malnutrition worldwide. Nutrition Reviews, 60, S46–52.

Ramsden, C.E., Hibbeln, J.R., Majchzak, S.F., & Davis, J.M. (2010). n-6 fatty acid-specific and mixed polyunsaturated dietary interventions have different effects on CHD risk: a meta-analysis of randomised controlled trials. British Journal of Nutrition, 104, 1586-1600.

Rathore, S.S., Saxena, S.N., & Singh, B. (2013). Potential health benefits of major seed spices. International Journal of Seed Spices, 3, 1-12.

Raubenheimer, D., Machovsky-Capuska, G., Felton, A.M., & Simpson, S. (2014). Nutritional geometry: from insects to ruminants. Animal Production Science, 30, 32-36.

Reeve, J.R., Hoagland, L., Villalba, J., Carr, P., Atucha, A., Cambardella, C., Davis, D. R., & Delete, K. (2015). Organic farming, soil health, and food quality: considering possible linkages. PLOS ONE submitted.

Remer, T. & Manz, F. (1995). Potential renal acid load of foods and its influence on urine pH. Journal of the American Dietetic Association, 95, 791 – 797.

Remick, A.K., Polivy, J. & Pliner, P. (2009). Internal and external moderators of the effect of variety on food intake. Psychological Bulletin, 135, 434–451.

Renaud, S. & de Lorgeril, M. (1992). Wine, alcohol, platelets, and the French paradox for coronary heart disease. Lancet, 339, 1523–1526.

Ristow, M., Zarse, K., Oberbach, A., Kloting, N., Birringer, M., Kiehntopf, M., Stumvoll, M., Kahn, C.R., & Bluher, M. (2009). Antioxidants prevent health-promoting effects of physical exercise in humans. Proceedings of the National Academy of Sciences, 106, 8665-8670.

Robinson, J. (2013). Eating on the wild side: the missing link to optimum health. New York: Little, Brown and Company.

Rock, C.L. (2007). Multivitamin-multimineral supplements: who uses them? American Journal of Clinical Nutrition, 85, 277S–9S.

Rogers, Q.R, & Egan, A.R. (1975). Amino acid imbalance in the liquid-fed lamb. Australian Journal of Biological Science, 28, 169-181.

Rohrmann, S., Overvad, K. Bueno-de-Mesquita, H.B., Jakobsen, M.U., & Egeberg, R. et al. (2013). Meat consumption and mortality - results from the European Prospective Investigation into Cancer and Nutrition. BMC Medicine, 11, 63.

Rolls, B.J. (1979). How variety and palatability can stimulate appetite. Nutrition Bulletin, 5, 78–86.

Rolls, B.J. (1986). Sensory-specific satiety. Nutrition Reviews, 44, 93-101.

Rolls, B.J. (2009). The relationship between dietary energy density and energy intake. Physiology & Behavior, 97, 609-615.

Rolls, B.J. (2012). Dietary strategies for weight management. In A. Drewnowski & B.J. Rolls [Eds]: Obesity Treatment and prevention: new directions, pp. 37–48 Nestlé Nutrition Institute Workshop Series, Volume 73. Basel: Nestec Ltd..

Rolls, B.J., Rolls, E.T., & Rowe, E.A. (1982). The influence of variety on human food selection and intake. In L.M. Baker [Ed.], The psychobiology of human food selection, pp. 101–122. Westport: AVI.

Rolls, B.J., Roe, L.S., & Meengs, J.S. (2004). Salad and satiety: energy density and portion size of a first-course salad affect energy intake at lunch. Journal of the American Dietetic Association, 104, 1570-1576.

Rose, E.A., Porcerelli, J.H., & Neale, A.V. (2000). Pica: common but commonly missed. Journal of the American Board of Family Practice, 13, 353-358.

Rosenthal, G.A., & Janzen, D.H. (Eds.). (1979). Herbivores: their interaction with secondary plant metabolites. New York: Academic Press.

Rosenthal, G.A., & Berenbaum, M.R. (Eds). (1992). Herbivores: their interactions with secondary plant metabolites. New York: Academic Press.

Rozin, P. (1989). Disorders of food selection: the compromise of pleasure. Annals of the New York Academy of Sciences, 575, 376–385.

Rozin, P. (1996). Towards a psychology of food and eating: from motivation to model to meaning, morality and metaphor. Current Directions in Psychological Science, 5, 1–7.

Rozin, P., Ashmore, M.B. & Markwith, M. (1996). Lay American conceptions of nutrition: dose insensitivity, categorical thinking, contagion, and the monotonic mind. Health Psychology, 15, 438–447.

Rozin, P., Fischler, C., Imada, S., Sarubin, A., Wrzesniewski, A. (1999). Attitudes to food and the role of food in life in the U.S.A., Japan, Flemish Belgium and France: possible Implications for the diet–health debate. Appetite, 33, 163–180.

Rozin, P., Kabnick, K., Pete, E., Fischler, C., & Shields, C. (2003). The ecology of eating: smaller portion sizes in France than in the United States help explain the French paradox. Psychological Science, 14, 450, 454.

Ruff, C., Trinklaus, E., Walker, A., & Larsen, C.S. (1993). Postcranial robusticity in Homo. I: Temporal trends and mechanical interpretation. American Journal of Physiology and Anthropology, 91, 21– 53.

Russell, J.B., O'Connor, J.D., Fox, G.G., Van Soest, P.J., & Sniffen C.J. (1992). A net carbohydrate and protein system for evaluating cattle diets: I. Ruminal fermentation. Journal of Animal Science, 70, 3551-3561.

Samuelson, R.J. (1990). The economist book of vital world statistics. New York: Random House.

Sanudo, C., Alfonso, M., San Julian, R., Thorkellson, G., Valdimarsdottir, T., Zygoyiannis, D., Stamataris, C., Piasentier, E., Mills, C., Perge, P., Dransfield, E., Nute, G.R., Enser, M., Fisher, A.V. (2007). Regional variation in the hedonic evaluation of lamb meat from diverse production systems by consumers in six European countries. Meat Science, 75, 610-621.

Sapone, A., Bai, J.C., Ciacci, C., Dolinsek, J., Green, P.H.R., Hadjivassiliou, M., Kaukinen, K., Rostami, K., Sanders, D.S., Schumann, M., Ullrich, R., Villalta, D., Volta, U., Catassi, C., & Fasano, A. (2012). Spectrum of gluten-related disorders: consensus on new nomenclature and classification. BMC Medicine, 10, 13 http://www.biomedcentral.com/1741-7015/10/13.

Scharf, R.J., Demmer, R.T., & DeBoer, M.D. (2013). Longitudinal evaluation of milk type consumed and weight status in preschoolers. Archives of Diseases in Childhood, 98, 335–340.

Schatzker, M. (2010). Steak: one man’s search for the world’s tastiest piece of beef. New York: Viking.

Schatzker, M. (2015). The Dorito effect: the surprising new truth about food and flavor. New York: Simon & Schuster.

Schwieterman, M.L., Colquhoun, T.A., Jaworski, E.A., Bartoshuk, L.M., & Gilbert, J.L., et al. (2014). Strawberry flavor: diverse chemical compositions, a seasonal influence, and effects on sensory perception. PLoS ONE 9(2): e88446. doi:10.1371/journal.pone.0088446.

Scott, L.L., & Provenza, F.D. (1998). Variety of foods and flavors affects selection of foraging locations by sheep. Applied Animal Behaviour Science, 61, 113-122.

Scott, L.L., & Provenza, F.D. (1999). Variation in food selection among lambs: effects of basal diet and foods offered in a meal. Journal of Animal Science, 77, 2391-2397.

Scott, L.L., & Provenza, F.D. (2000). Lambs fed protein or energy imbalanced diets forage in locations and on foods that rectify imbalances. Applied Animal Behaviour Science, 68, 293-305.

Sebastian, A., Harris, S.T., Ottaway, J.H., Todd, K.M., & Morris, R.C. (1994). Improved mineral balance and skeletal metabolism in postmenopausal women treated with potassium bicarbonate. New England Journal of Medicine, 33, 1776 – 1781.

Seefeldt, S.S. (2005). Consequences of selecting Ramboulliet ewes for Mountain Big Sagebrush (Artemisia tridentata ssp. vaseyana) dietary preference. Rangeland Ecology & Management, 58, 380-384.

Shaw, R.A., Villalba, J.J., & Provenza F.D. (2006a). Resource availability and quality influence patterns of diet mixing by sheep. Journal of Chemical Ecology, 32, 1267-1278.

Shaw, R.A., Villalba, J.J., & Provenza F.D. (2006b). The influence of stocking density on diet mixing behavior of sheep grazing on a sagebrush steppe. Applied Animal Behaviour Science, 100, 207-218.

Simitzis, P.E., Deligeorgis, S.G., Bizelis, J.A., Fegeros, K. (2008). Feeding preferences in lambs influenced by prenatal flavour exposure. Physiology & Behavior, 93, 529-536.

Simpson, S.J., Batley, R., & Raubenheimer, D. (2003). Geometric analysis of macronutrient selection in humans: the power of protein? Appetite, 41, 123–140.

Simpson, S.J., & Raubenheimer, D. (2005). Obesity: the protein leverage hypothesis. Obesity Reviews. 6, 133–142.

Sinclair, L.A., Garnsworthy, P.C., Newbold, J.R., & Buttery P.J. (1993). Effect of synchronizing the rate of dietary energy and nitrogen release on rumen fermentation and microbial protein synthesis in sheep. Journal of Agricultural Science (Cambridge), 120, 251-263.

Siri-Tarino, P.W., Sun, Q., Hu, F.B., Krauss, R.M. (2010) Meta-analysis of prospective cohort studies evaluating the association of saturated fat with cardiovascular disease. American Journal of Clinical Nutrition, 91, 535–546.

Smith, J., Cianflone, K., Biron, S., Hould, F.S., Lebel, S., Marceau, S., Lescelleur, O., Biertho, L., Simard, S., Kral. J.G., Marceau, P. (2009). Effects of maternal surgical weight loss in mothers on intergenerational transmission of obesity. Journal of Clinical Endocrinology & Metabolism, 94, 4275-4283.

Smith, J.D., Hou T., Ludwig, D.S., Rimm, E.B., Willett, W., Hu, F.B., & Mozaffarian, D. (2015). Changes in intake of protein foods, carbohydrate amount and quality, and long-term weight change: results from 3 prospective cohorts. American Journal of Clinical Nutrition, 101, 1-9.

Sørensen, L.B., Møller, P., Flint, A., Martens, M. & Raben, A. (2003). Effect of sensory perception of foods on appetite and food intake: a review of studies on humans. International Journal of Obesity, 27, 1152–1166.

Spill, M.K., Birch, L.L., Roe, L.S., & Rolls, B.J. (2011). Hiding vegetables to reduce energy density: an effective strategy to increase children’s vegetable intake and reduce energy intake. American Journal of Clinical Nutrition, 94, 735-741.

Strickland, J.R., Klein, G.S., Ross, T.T., Samantha, S., Peterson, M.K., May, T. & Taylor, J.B. (1998). Effects of nutrient supplementation in beef cows of poor body condition fed snakeweed (Gutierrezia spp). Veterinary and Human Toxicology, 40, 278-284.

Strobel, N.A, Peake, J.M., Matsumoto, A., Marsh, S.A., Coombes, J.S., & Wadley, G.D. (2011). Antioxidant supplementation reduces skeletal muscle mitochondrial biogenesis. Medicine and Science in Sports and Exercise, 43, 1017-1024.

Ströhle, A., & Hahn, A. (2011). Diets of modern hunter-gatherers vary substantially in their carbohydrate content depending on ecoenvironments: results from an ethnographic analysis. Nutrition Research, 31, 429-435.

Sutcliffe, A.J. (1977). Further notes on bones and antlers chewed by deer and other ungulates. Journal of the British Deer Society, 4, 73-82.

Taubes, G. (2007). Good calories bad calories: challenging the conventional wisdom on diet, weight control, and disease. New York: Alfred A. Knopf.

Taylor, P.D., & Poston, L. (2007). Developmental programming of obesity in mammals. Experimental Physiology, 92, 287-298.

Teng, K.-T., Chang, C.-Y., Chang, L.F., & Nesaretnam, K. (2014). Modulation of obesity-induced inflammation by dietary fats: mechanisms and clinical evidence. Nutrition Journal 13, 12 http://www.nutritionj.com/content/13/1/12.

The Age-Related Eye Disease Study 2 (AREDS2) Research Group. (2013). Lutein + Zeaxanthin and Omega-3 Fatty Acids for Age-Related Macular Degeneration. Journal of the American Medical Association, 309, 2005-2015.

The Risk and Prevention Study Collaborative Group. (2013). n–3 fatty acids in patients with multiple cardiovascular risk factors. New England Journal of Medicine, 368, 1800-1808.

Thorhallsdottir, A.G., Provenza, F.D., & Balph, D.F. (1990). Ability of lambs to learn about novel foods while observing or participating with social models. Applied Animal Behaviour Science, 25, 25-33.

Tieman, D., Bliss, P., McIntyre, L.M., Blandon-Ubeda, A., & Bies, D., et al. (2012). The chemical interactions underlying tomato flavor preferences. Current Biology, 22, 1035–1039.

Tremblay, A, & Arguin, H. (2013). Functional foods, satiation and satiety. In: J.E. Blundell, & F. Bellisle, (Eds.) Satiation, satiety and the control of food intake, pp. 202-218.Woodhead Publishing. Oxford.

Tylavsky, F.A., Spence, L.A., & Harkness, L. (2008). The importance of calcium, potassium, and acid-base homeostasis in bone health and osteoporosis prevention. Journal of Nutrition, 138, 164S-165S.

Van de Rest, O., Geleijnse, J.M., Kok, F.J., van Staveren, W.A., Dullemeijer, C., Olderikkert, M.G., Beekman, A.T., & de Groot, C.P. (2008). Effect of fish oil on cognitive performance in older subjects: a randomized, controlled trial. Neurology, 71, 430-438.

Van Elswyk, M.E., & S.H. McNeill. (2014). Impact of grass/forage feeding versus grain finishing on beef nutrients and sensory quality: the U.S. experience. Meat Science, 96, 535-540.

Vasta, V., Nudda, A., Cannas, A., Lanza, M., & Priolo, A. (2008). Alternative feed resources and their effects on the quality of meat and milk from small ruminants. Animal Feed Science and Technology, 147, 223–246.

Villalba, J.J., & Provenza, F.D. (1996). Preference for flavored wheat straw by lambs conditioned with intraruminal administrations of sodium propionate. Journal of Animal Science.74, 2362-2368.

Villalba, J.J., & Provenza, F.D. (1997a). Preference for wheat straw by lambs conditioned with intraruminal infusions of starch. British Journal of Nutrition, 77, 287-297.

Villalba, J.J., & Provenza, F.D. (1997b). Preference for flavored foods by lambs conditioned with intraruminal administrations of nitrogen. British Journal of Nutrition, 78, 545-561.

Villalba, J.J., & Provenza, F.D. (1997c). Preference for flavored wheat straw by lambs conditioned with intraruminal infusions of acetate and propionate. Journal of Animal Science, 75, 2905-2914.

Villalba, J.J., & Provenza, F.D. (1999). Nutrient-specific preferences by lambs conditioned with intraruminal infusions of starch, casein, and water. Journal of Animal Science, 77, 378-387.

Villalba, J.J., & Provenza, F.D. (2001). Preference for polyethylene glycol by sheep fed a quebracho tannin diet. Journal of Animal Science, 79, 2066-2074.

Villalba, J.J., Provenza, F.D., & Banner, R.E. (2002a). Influence of macronutrients and activated charcoal on utilization of sagebrush by sheep and goats. Journal of Animal Science, 80, 2099-2109.

Villalba, J.J., Provenza, F.D., & Banner, R.E. (2002b). Influence of macronutrients and polyethylene glycol on intake of a quebracho tannin diet by sheep and goats. Journal of Animal Science, 80, 3154-3164.

Villalba, J.J., Provenza, F.D., & Bryant, J.B. (2002c). Consequences of nutrient-toxin interactions for herbivore selectivity: benefits or detriments for plants? Oikos, 97, 282-292.

Villalba, J.J., Provenza, F.D., & Han G-H. (2004). Experience influences diet mixing by herbivores: Implications for plant biochemical diversity. Oikos, 107, 100-109.

Villalba, J.J., Provenza, F.D., & Hall, J.O. (2008). Learned appetites for calcium, phosphorus, and sodium in sheep. Journal of Animal Science, 86, 738-747.

Villalba, J.J., Provenza, F.D., & Shaw, R. (2006). Sheep self-medicate when challenged with illness-inducing foods. Animal Behaviour, 71, 1131–1139.

Villalba, J.J., Provenza, F.D., Catanese, F., Distel, R.A. (2015) Understanding and manipulating diet choice in grazing animals. Animal Production Science 55, 261-271.

Villalba, J.J., Provenza, F.D., Clemensen, A.K., Larsen, R, & Junke, J. (2011). Preference for diverse pastures by sheep in response to intraruminal administrations of tannins, saponins, and alkaloids. Grass and Forage Science, 66, 224-236.

Villalba, J.J., Miller, J., Hall, J.O., Clemensen, A.K., Stott, R., Snyder, D., Provenza, F.D. (2013). Preference for tanniferous (Onobrychis viciifolia) and non-tanniferous (Astragalus cicer) forage plants by sheep in response to challenge infection with Haemonchus contortus. Small Ruminant Research, 112, 199-207.

Villanueva, C., & Kross, R.D. (2012). Antioxidant-induced stress. International Journal of Molecular Sciences, 13, 2091-2109.

Waghorn, G.C. (1990). Beneficial effects of low concentrations of condensed tannins in forages fed to ruminants. In D.E. Akin, L.G. Ljungdahl, J.R. Wilson, & P.J. Harris [Eds.] Microbial and plant opportunities to improve lignocellulose utilization by ruminants, pp. 137-147. New York: Elsevier.

Wallis de Vries, M.F. (1994). Foraging in a landscape mosaic: Diet selection and performance of free-ranging cattle in heathland and riverine grassland. PhD Thesis, Wageningen.

Wang, J., & Provenza, F.D. (1996). Food deprivation affects preference of sheep for foods varying in nutrients and a toxin. Journal of Chemical Ecology, 22, 2011-2021.

Wang, G.J., Volkow, N.D., Logan, J., Pappas, N.R., Wong, C.T., Zhu, W., Netusll, N., & Fowler J.S. (2001). Brain dopamine and obesity. Lancet, 357, 354–357.

Webster, A.J.F. (1993). Energy partitioning, tissue growth and appetite control. Proceedings of the Nutrition Society, 52, 69-76.

Weil, A. (2004). Healing, nature, and modern medicine. In K. Ausubel [Ed.], Ecological medicine. San Francisco: Sierra Club Books.

Westerterp-Plantenga MS, Lemmens SG, Westerterp, K.R. (2012). Dietary protein—its role in satiety, energetics, weight loss and health. British Journal of Nutrition, 108, S105–112.

Westoby, M. (1978). What are the biological bases of varied diets? American Naturalist, 112, 627-631.

Wiedmeier, R.D., Walters, J.L., & Cockett, N.E. (1995). Heritability of low-quality forage utilization in beef cattle. Proceedings of the Western Section of the American Society of Animal Science, 46, 404-406.

Wiedmeier, R.D., Provenza, F.D., & Burritt, E.A. (2002). Exposure to ammoniated wheat straw as suckling calves improves performance of mature beef cows wintered on ammoniated wheat straw. Journal of Animal Science, 80, 2340–2348.

Wiedmeier, R.W., Villalba, J.J., Summers, A., & Provenza, F.D. (2012). Eating a high-fiber diet during pregnancy increases intake and digestibility of a high-fiber diet by offspring in cattle. Animal Feed Science and Technology, 177, 144-151.

Williams, J.L., Campos, D., Ross, T.T., Becker, K.A., Martinez, J.M., Oetting, B.C., & Smith, G.S. (1992). Snakeweed (Gutierrezia spp.) Toxicosis in beef heifers. Proceedings of the Western Section of the American Society of Animal Science, 43, 67-69.

Wrangham, R., & Conklin-Brittain, N.L. (2003). ‘Cooking as a biological trait’. Comparative Biochemistry and Physiology Part A, 136, 35–46.

Yfanti, C., Akerstrom, T., Nielsen, S., Nielsen, A.R., Mounier, R., Mortensen, O.H., Lykkesfeldt, J., Rose, A.J., Fischer, C.P., & Pedersen, B.K. (2010). Antioxidant supplementation does not alter endurance training adaptation. Medicine and Science in Sports and Exercise, 42, 1388-1395.

Yfanti, C., Fischer, C.P., Nielsen, S., Akerstrom, T., Nielsen, A.R., Veskoukis, A.S., Kouretas, D., Lykkesfeldt, J., Pilegaard, H., & Pedersen, B.K. (2012). Role of vitamin C and E supplementation on IL-6 in response to training. Journal of Applied Physiology, 112, 990-1000.

Yokoyama, M., Origasa, H., Matsuzaki, M., Matsuzawa, Y., Saito, Y., Ishikawa, Y., Oikawa, S., Sasaki, J., Hishida, H., Itakura, H., Kita, T., Kitabatake, A., Nakaya, N., Sakata, T., Shimada, K., & Shirato, K., for the Japan EPA lipid intervention study (JELIS) Investigators. (2007). Effects of eicosapentaenoic acid on major coronary events in hypercholesterolaemic patients (JELIS): a randomised open-label, blinded endpoint analysis. Lancet, 369, 1090-1098.

Yeomans, M.R. (2012). Flavour-nutrient learning in humans: An elusive phenomenon? Physiology and Behavior 106, 345-355.

**Transcending Boundaries**

Alexander, E. (2012) Proof of Heaven: a neurosurgeon’s journey into the afterlife. New York: Simon & Schuster.

Bronson, P. (2002). What Should I Do with the Rest of My Life? New York: Random House Inc.

Campbell, J. (1988). Myths to Live by. Viking Penguin Inc., New York, NY.

Campbell, J. and B. Moyers. (1988). The Power of Myth. Doubleday, New York, NY.

Eadie, B.J. (1994). Embraced by the Light. New York: Bantam.

Gibran, K. (1990). The Prophet. New York: Alfred A. Knopf.

Jantash, E. (1980). The Self-Organizing Universe. Oxford: Pergamon Press.

Wheatley, M.J. (1994). Leadership and the New Science: Learning about Organization from an Orderly Universe. San Francisco: Berrett-Koehler Inc.