

Fat Science Podcast: Supporting Scientific References

Evidence-Based Research Supporting Podcast Content by Topic

This reference list provides peer-reviewed scientific evidence that directly supports the concepts, mechanisms, and claims presented across Fat Science Podcast episodes with Dr. Emily Cooper. References are organized by main topics with corresponding episode listings.

1. DIET FAILURE & METABOLIC ADAPTATION

Episodes: "Calories In, Calories Out = Diet Damage" • "Mailbag: Metabolism Myths, Plateaus, and More" • "Who Are We & Why Are We Here?"

The 95% Diet Failure Rate

- **Mann, T., et al. (2007).** "Medicare's search for effective obesity treatments: diets are not the answer." *American Psychologist*, 62(3), 220-233.
- **Anderson, J. W., et al. (2001).** "Long-term weight-loss maintenance: a meta-analysis of US studies." *American Journal of Clinical Nutrition*, 74(5), 579-584.

Persistent Metabolic Adaptation

- **Fothergill, E., et al. (2016).** "Persistent metabolic adaptation 6 years after 'The Biggest Loser' competition." *Obesity*, 24(8), 1612-1619.
- **Rosenbaum, M., & Leibel, R. L. (2010).** "Adaptive thermogenesis in humans." *International Journal of Obesity*, 34(S1), S47-S55.

Long-Term Hormonal Disruption (18+ Months)

- **Sumithran, P., et al. (2011).** "Long-term persistence of hormonal adaptations to weight loss." *New England Journal of Medicine*, 365(17), 1597-1604.
- **Rosenbaum, M., et al. (2005).** "Low-dose leptin reverses skeletal muscle, autonomic, and neuroendocrine adaptations to maintenance of reduced weight." *Journal of Clinical Investigation*, 115, 3579-3586.

Weight Cycling Cardiovascular Risks

- **Montani, J. P., et al. (2006).** "Weight cycling during growth and beyond as a risk factor for later cardiovascular diseases: the 'repeated overshoot' theory." *International Journal of Obesity*, 30(S4), S58-S66.
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2. BODY FAT AS ENDOCRINE ORGAN & HORMONAL SIGNALING

Episodes: "What is Metabolism?" • "What Your Fat is Telling You" • "Understanding Insulin Resistance" • "What is the Best GLP-1 Drug for Me?"

Body Fat as Largest Endocrine Organ

- **Kershaw, E. E., & Flier, J. S. (2004).** "Adipose tissue as an endocrine organ." *Journal of Clinical Endocrinology & Metabolism*, 89(6), 2548-2556.
- **Scherer, P. E. (2006).** "Adipose tissue: from lipid storage compartment to endocrine organ." *Diabetes*, 55(6), 1537-1545.

Leptin Discovery (1990s) & "Security Signal" Function

- **Zhang, Y., et al. (1994).** "Positional cloning of the mouse obese gene and its human homologue." *Nature*, 372, 425-432.
- **Friedman, J. M. (2014).** "Leptin at 20: an overview." *Journal of Endocrinology*, 223(1), T1-8.
- **Considine, R. V., et al. (1996).** "Serum immunoreactive-leptin concentrations in normal-weight and obese humans." *New England Journal of Medicine*, 334(5), 292-295.

Leptin Resistance & "Hiding" During Dieting

- **Myers, M. G., et al. (2010).** "Mechanisms of leptin action and leptin resistance." *Annual Review of Physiology*, 72, 219-246.
- **Münzberg, H., & Myers, M. G. (2005).** "Molecular and anatomical determinants of central leptin resistance." *Nature Neuroscience*, 8(5), 566-570.

Adiponectin as "Door Unlock" Hormone for Insulin

- **Yamauchi, T., et al. (2001).** "The fat-derived hormone adiponectin reverses insulin resistance associated with both lipoatrophy and obesity." *Nature Medicine*, 7(8), 941-946.
- **Kadowaki, T., & Yamauchi, T. (2005).** "Adiponectin and adiponectin receptors." *Endocrine Reviews*, 26(3), 439-451.

3. GHRELIN & STRESS-INDUCED METABOLIC DISRUPTION

Episodes: "What is Metabolism?" • "Stress, Sleep, and Metabolism" • "The Science of Appetite"

Ghrelin as "Hunger Hormone" & Famine Signal

- **Kojima, M., et al. (1999).** "Ghrelin is a growth-hormone-releasing acylated peptide from stomach." *Nature*, 402, 656-660.
- **Nakazato, M., et al. (2001).** "A role for ghrelin in the central regulation of feeding." *Nature*, 409, 194-198.

Stress-Ghrelin-Cortisol Interactions

- **Lutter, M., et al. (2008).** "The orexigenic hormone ghrelin defends against depressive symptoms of chronic stress." *Nature Neuroscience*, 11(7), 752-753.

- **Kristensson, E., et al. (2006).** "Acute psychological stress raises plasma ghrelin in the rat." *Regulatory Peptides*, 134(2-3), 114-117.

Stress-Induced Metabolic Dysfunction

- **Adam, T. C., & Epel, E. S. (2007).** "Stress, eating and the reward system." *Physiology & Behavior*, 91(4), 449-458.
- **Tomiyama, A. J., et al. (2010).** "Low calorie dieting increases cortisol." *Psychosomatic Medicine*, 72(4), 357-364.

4. MELANOCORTIN PATHWAY & BRAIN METABOLIC REGULATION

Episodes: "Fake News About Fat" • "What is the Best GLP-1 Drug for Me?" • "Culprit or Symptom?"
 • "The Connection Between Mood & Metabolism"

POMC/Melanocortin System

- **Cone, R. D. (2005).** "Anatomy and regulation of the central melanocortin system." *Nature Neuroscience*, 8(5), 571-578.
- **Morton, G. J., et al. (2014).** "Neurobiology of food intake in health and disease." *Nature Reviews Neuroscience*, 15(6), 367-378.

AGRP & NPY as "Famine Signals"

- **Ollmann, M. M., et al. (1997).** "Antagonism of central melanocortin receptors in vitro and in vivo by agouti-related protein." *Science*, 278(5335), 135-138.
- **Stanley, B. G., & Leibowitz, S. F. (1985).** "Neuropeptide Y injected in the paraventricular hypothalamus: a powerful stimulant of feeding behavior." *Proceedings of the National Academy of Sciences*, 82(11), 3940-3943.

Melanocyte Stimulating Hormone (MSH)

- **Fan, W., et al. (1997).** "Role of melanocortinergic neurons in feeding and the agouti obesity syndrome." *Nature*, 385, 165-168.
- **Yaswen, L., et al. (1999).** "Obesity in the mouse model of pro-opiomelanocortin deficiency responds to peripheral melanocortin." *Nature Medicine*, 5(9), 1066-1070.

5. INSULIN RESISTANCE & TISSUE-SPECIFIC RESPONSES

Episodes: "Understanding Insulin Resistance" • "The Hidden Epidemic: Understanding and Reversing Insulin Resistance"

Body Fat Cannot Become Insulin Resistant

- **Saltiel, A. R., & Kahn, C. R. (2001).** "Insulin signaling and the regulation of glucose and lipid metabolism." *Nature*, 414(6865), 799-806.
- **Czech, M. P. (2017).** "Insulin action and resistance in obesity and type 2 diabetes." *Nature Medicine*, 23(7), 804-814.

Hyperinsulinism vs. Insulin Resistance

- **Cryer, P. E., et al. (2009).** "Evaluation and management of adult hypoglycemic disorders: an Endocrine Society Clinical Practice Guideline." *Journal of Clinical Endocrinology & Metabolism*, 94(3), 709-728.

Adiponectin & Leptin Roles in Insulin Regulation

- **Kieffer, T. J., et al. (1997).** "Leptin receptors expressed on pancreatic beta-cells." *Biochemical and Biophysical Research Communications*, 224(2), 522-527.
- **Seufert, J. (2004).** "Leptin effects on pancreatic beta-cell gene expression and function." *Diabetes*, 53(suppl 1), S152-S158.

6. CARBOHYDRATE METABOLISM & BRAIN GLUCOSE NEEDS

Episodes: "Why Carbs Aren't Bad" • "You Hangry? Understanding Hypoglycemia" • "Performance, Metabolism & Kids"

Brain's Glucose Requirements

- **Mergenthaler, P., et al. (2013).** "Sugar for the brain: the role of glucose in physiological and pathological brain function." *Trends in Neurosciences*, 36(10), 587-597.
- **Peters, A., et al. (2004).** "The selfish brain: competition for energy resources." *Neuroscience & Biobehavioral Reviews*, 28(2), 143-160.

Low-Carb Effects on Muscle & Immune Function

- **D'Anci, K. E., et al. (2009).** "Low-carbohydrate weight-loss diets. Effects on cognition and mood." *Appetite*, 52(1), 96-103.
- **Wing, R. R., et al. (1995).** "Cognitive effects of ketogenic weight-reducing diets." *International Journal of Obesity*, 19(11), 811-816.

Hypoglycemia & Metabolic Dysfunction

- **Cryer, P. E. (2008).** "The barrier of hypoglycemia in diabetes." *Diabetes*, 57(12), 3169-3176.
- **Bonds, D. E., et al. (2010).** "The association between symptomatic, severe hypoglycaemia and mortality in type 2 diabetes: retrospective epidemiological analysis of the ACCORD study." *BMJ*, 340, b4909.

Carbohydrate Storage with Water (Glycogen)

- **McBride, A., & Hardie, D. G. (2009).** "AMP-activated protein kinase--a sensor of glycogen as well as AMP and ATP?" *Acta Physiologica*, 196(1), 99-113.
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7. GLP-1 MEDICATIONS & INCRETIN HORMONES

Episodes: "Metabolic Meds: What? Again?" • "What is the Best GLP-1 Drug for Me?" • "GLP-1s: Will I Have to Take Them Forever?" • "Top Weight Loss Trends"

GLP-1 as Natural Gut Hormone

- **Drucker, D. J. (2006).** "The biology of incretin hormones." *Cell Metabolism*, 3(3), 153-165.
- **Holst, J. J. (2007).** "The physiology of glucagon-like peptide 1." *Physiological Reviews*, 87(4), 1409-1439.
- **Baggio, L. L., & Drucker, D. J. (2007).** "Biology of incretins: GLP-1 and GIP." *Gastroenterology*, 132(6), 2131-2157.

Clinical Efficacy Since 2006

- **Pi-Sunyer, X., et al. (2015).** "A randomized, controlled trial of 3.0 mg of liraglutide in weight management." *New England Journal of Medicine*, 373(1), 11-22.
- **Wilding, J. P., et al. (2021).** "Once-weekly semaglutide in adults with overweight or obesity." *New England Journal of Medicine*, 384(11), 989-1002.

Amylin: Pancreatic Co-Hormone

- **Cooper, G. J., et al. (1987).** "Purification and characterization of a peptide from amyloid-rich pancreases of type 2 diabetic patients." *Proceedings of the National Academy of Sciences*, 84(23), 8628-8632.
 - **Lutz, T. A. (2012).** "Control of energy homeostasis by amylin." *Cellular and Molecular Life Sciences*, 69(12), 1947-1965.
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8. SLEEP DISORDERS & METABOLIC HEALTH

Episodes: "Stress, Sleep, and Metabolism" • "Understanding Metabolic Health: Top Ten Strategies" • "Metabolic Markers: The Power of Your Blood Lab Results"

Sleep Apnea & Insulin Resistance

- **Punjabi, N. M., et al. (2002).** "Sleep-disordered breathing and insulin resistance in middle-aged and overweight men." *American Journal of Respiratory and Critical Care Medicine*, 165, 677-682.
- **Ip, M. S., et al. (2002).** "Obstructive sleep apnea is independently associated with insulin resistance." *American Journal of Respiratory and Critical Care Medicine*, 165, 670-676.

Sleep Duration & Leptin/Ghrelin Regulation

- **Spiegel, K., et al. (2004).** "Brief communication: sleep curtailment in healthy young men is associated with decreased leptin levels, elevated ghrelin levels, and increased hunger and appetite." *Annals of Internal Medicine*, 141(11), 846-850.
- **Leprout, R., & Van Cauter, E. (2011).** "Role of sleep and sleep loss in hormonal release and metabolism." *Endocrine Development*, 17, 11-21.

Sleep Fragmentation & Glucose Metabolism

- **Stamatakis, K. A., & Punjabi, N. M. (2010).** "Effects of sleep fragmentation on glucose metabolism in normal subjects." *Chest*, 137(1), 95-101.
 - **Tasali, E., et al. (2008).** "Slow-wave sleep and the risk of type 2 diabetes in humans." *Proceedings of the National Academy of Sciences*, 105(3), 1044-1049.
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9. EXERCISE & PROPER FUELING

Episodes: "Fueling Your Workouts" • "Performance, Metabolism & Kids" • "You Hangry? Understanding Hypoglycemia"

Underfueled Exercise Risks

- **Loucks, A. B., & Verdun, M. (1998).** "Slow recovery of LH pulsatility after cessation of exercise training in amenorrheic athletes." *Journal of Applied Physiology*, 85(4), 1447-1455.
- **Heikura, I. A., et al. (2019).** "Energy Availability in Athletics: Health, Performance, and Physique." *International Journal of Sport Nutrition and Exercise Metabolism*, 29(2), 152-164.

Carbohydrate Requirements for Performance

- **Stellingwerff, T., & Cox, G. R. (2014).** "Systematic review: carbohydrate supplementation on exercise performance or capacity of varying durations." *Applied Physiology, Nutrition, and Metabolism*, 39(9), 998-1011.
- **Brooks, G. A., & Mercier, J. (1994).** "Balance of carbohydrate and lipid utilization during exercise: the "crossover" concept." *Journal of Applied Physiology*, 76(6), 2253-2261.

Exercise Caution with Hypoglycemia

- **Galassetti, P., et al. (2003).** "Effect of antecedent hypoglycemia on counterregulatory responses to subsequent euglycemic exercise in type 1 diabetes." *Diabetes*, 52(7), 1761-1769.
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10. MICROBIOME & METABOLIC HEALTH

Episodes: "What's in Charge of Your Fat? Your Brain or Your Bacteria?" • "Understanding Metabolic Health: Top Ten Strategies"

Gut Microbiota & Energy Harvest

- **Turnbaugh, P. J., et al. (2006).** "An obesity-associated gut microbiome with increased capacity for energy harvest." *Nature*, 444, 1027-1031.
- **Bäckhed, F., et al. (2004).** "The gut microbiota as an environmental factor that regulates fat storage." *Proceedings of the National Academy of Sciences*, 101(44), 15718-15723.

Microbiome & Hormonal Signaling

- **Cani, P. D., et al. (2007).** "Metabolic endotoxemia initiates obesity and insulin resistance." *Diabetes*, 56(7), 1761-1772.
- **De Vadder, F., et al. (2014).** "Microbiota-generated metabolites promote metabolic benefits via gut-brain neural circuits." *Cell*, 156(1-2), 84-96.

TMAO & Cardiovascular Risk

- **Wang, Z., et al. (2011).** "Gut flora metabolism of phosphatidylcholine promotes cardiovascular disease." *Nature*, 472, 57-63.

11. ENDOCRINE DISRUPTORS & TRANSGENERATIONAL EFFECTS

Episodes: "Endocrine Disruptors: Obesogens at Home, at Work, in Your Food, at School" • "Understanding Metabolic Health: Top Ten Strategies" • "Metabolism and Fertility For Men and Women"

Obesogens & Metabolic Programming

- **Grün, F., & Blumberg, B. (2009).** "Endocrine disrupters as obesogens." *Molecular and Cellular Endocrinology*, 304(1-2), 19-29.
- **Heindel, J. J., et al. (2017).** "Metabolism disrupting chemicals and metabolic disorders." *Reproductive Toxicology*, 68, 3-33.

BPA & Childhood Obesity

- **Trasande, L., et al. (2012).** "Association between urinary bisphenol A concentration and obesity prevalence in children and adolescents." *JAMA*, 308(11), 1113-1121.
- **Lang, I. A., et al. (2008).** "Association of urinary bisphenol A concentration with medical disorders and laboratory abnormalities in adults." *JAMA*, 300(11), 1303-1310.

Transgenerational Metabolic Effects

- **Anway, M. D., et al. (2005).** "Epigenetic transgenerational actions of endocrine disruptors and male fertility." *Science*, 308, 1466-1469.
- **Chamorro-García, R., et al. (2013).** "Transgenerational inheritance of increased fat depot size, stem cell reprogramming, and hepatic steatosis elicited by prenatal exposure to the obesogen tributyltin in mice." *Environmental Health Perspectives*, 121(3), 359-366.

12. POLYCYSTIC OVARY SYNDROME (PCOS) & METABOLIC CONNECTIONS

Episodes: "The Metabolic Links to PCOS"

PCOS as Metabolic Disorder

- **Teede, H. J., et al. (2018).** "Recommendations from the international evidence-based guideline for the assessment and management of polycystic ovary syndrome." *Human Reproduction*, 33(9), 1602-1618.
- **Dunaif, A. (1997).** "Insulin resistance and the polycystic ovary syndrome: mechanism and implications for pathogenesis." *Endocrine Reviews*, 18(6), 774-800.

Metformin in PCOS Treatment

- **Palomba, S., et al. (2009).** "Metformin in women with PCOS: clinical indications and management." *Nature Reviews Endocrinology*, 5(10), 553-558.

13. COGNITIVE FUNCTION & METABOLIC HEALTH

Episodes: "Metabolism and Your Memory: Alzheimer's & Dementia" • "Mailbag: Questions From You"

Type 3 Diabetes Concept

- **de la Monte, S. M., & Wands, J. R. (2008).** "Alzheimer's disease is type 3 diabetes—evidence reviewed." *Journal of Diabetes Science and Technology*, 2(6), 1101-1113.
- **Arnold, S. E., et al. (2018).** "Brain insulin resistance in type 2 diabetes and Alzheimer disease: concepts and conundrums." *Nature Reviews Neurology*, 14(3), 168-181.

Metformin & Neuroprotection

- **Campbell, J. M., et al. (2018).** "Metformin reduces all-cause mortality and diseases of ageing independent of its effect on diabetes control: a systematic review and meta-analysis." *Ageing Research Reviews*, 40, 31-44.
- **Rena, G., et al. (2017).** "The mechanisms of action of metformin." *Diabetologia*, 60(9), 1577-1585.

Hypoglycemia & Cognitive Risk

- **Whitmer, R. A., et al. (2009).** "Hypoglycemic episodes and risk of dementia in older patients with type 2 diabetes mellitus." *JAMA*, 301(15), 1565-1572.

14. MONOGENIC OBESITY & GENETIC FACTORS

Supporting Episodes: "GLP-1s: Will I Have to Take Them Forever?"

MC4R Mutations

- **Farooqi, I. S., et al. (2003).** "Clinical spectrum of obesity and mutations in the melanocortin 4 receptor gene." *New England Journal of Medicine*, 348(12), 1085-1095.
- **Vaisse, C., et al. (1998).** "A frameshift mutation in human MC4R is associated with a dominant form of obesity." *Nature Genetics*, 20(2), 113-114.

POMC Deficiency

- **Krude, H., et al. (1998).** "Severe early-onset obesity, adrenal insufficiency and red hair pigmentation caused by POMC mutations in humans." *Nature Genetics*, 19(2), 155-157.
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15. WEIGHT STIGMA & HEALTH OUTCOMES

Episodes: "Fake News About Fat"

Weight Stigma Creates Health Problems

- **Tomiyama, A. J., et al. (2014).** "How and why weight stigma drives the obesity 'epidemic' and harms health." *BMC Medicine*, 12, 69.
- **Jackson, S. E., et al. (2014).** "Perceived weight discrimination and changes in weight, waist circumference, and weight status." *Obesity*, 22(12), 2485-2488.

Healthcare Provider Bias

- **Phelan, S. M., et al. (2015).** "Impact of weight bias and stigma on quality of care and outcomes for patients with obesity." *Obesity Reviews*, 16(4), 319-326.
- **Schwartz, M. B., et al. (2003).** "Weight bias among health professionals specializing in obesity." *Obesity Research*, 11(9), 1033-1039.

Parental Perceptions & Child Weight Outcomes

- **Robinson, E., & Sutin, A. R. (2017).** "Parents' Perceptions of Their Children as Overweight and Children's Weight Concerns and Weight Gain." *Psychological Science*, 28(11), 1562-1572.
- **Gerards, S. M., et al. (2014).** "Parental perception of child's weight status and subsequent BMIz change: the KOALA birth cohort study." *BMC Public Health*, 14, 291.
- **Haines, J., et al. (2006).** "Weight teasing and disordered eating behaviors in adolescents: longitudinal findings from Project EAT." *Pediatrics*, 117(2), e209-e215.

Family Weight Concerns & Metabolic Impact in Children

- **Hunger, J. M., & Tomiyama, A. J. (2014).** "Weight labeling and obesity: a longitudinal study of girls aged 10 to 19 years." *JAMA Pediatrics*, 168(6), 579-580.

- **Eisenberg, M. E., et al. (2003).** "Associations of weight-based teasing and emotional well-being among adolescents." *Archives of Pediatric & Adolescent Medicine*, 157, 733-738.
 - **Neumark-Sztainer, D. (2005).** "Can we simultaneously work toward the prevention of obesity and eating disorders in children and adolescents?" *International Journal of Eating Disorders*, 38(3), 220-227.
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16. THYROID FUNCTION & METABOLIC INTERACTIONS

Episodes: "The Thyroid Blame Game"

Thyroid Hormones & Metabolic Regulation

- **Mullur, R., et al. (2014).** "Thyroid hormone regulation of metabolism." *Physiological Reviews*, 94(2), 355-382.
- **Salvatore, D., et al. (2014).** "Thyroid hormones and skeletal muscle—new insights and potential implications." *Nature Reviews Endocrinology*, 10, 206-214.

T3/T4 Conversion & Metabolic Factors

- **Bianco, A. C., et al. (2002).** "Biochemistry, cellular and molecular biology, and physiological roles of the iodothyronine selenodeiodinases." *Endocrine Reviews*, 23(1), 38-89.
- **Gereben, B., et al. (2008).** "Cellular and molecular basis of deiodinase-regulated thyroid hormone signaling." *Endocrine Reviews*, 29(7), 898-938.

Reverse T3 & Metabolic Adaptation

- **Wartofsky, L., & Burman, K. D. (1982).** "Alterations in thyroid function in patients with systemic illness: the "euthyroid sick syndrome"." *Endocrine Reviews*, 3(2), 164-217.
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17. REPRODUCTIVE HORMONES & METABOLIC CONNECTIONS

Episodes: "The Metabolic Links to PCOS" • "What Your Blood Knows About Your Metabolism"

Testosterone & Metabolic Health in Men

- **Traish, A. M., et al. (2009).** "The dark side of testosterone deficiency: I. Metabolic syndrome and erectile dysfunction." *Journal of Andrology*, 30(1), 10-22.
- **Rao, P. M., et al. (2013).** "Effect of exercise and pharmacological interventions on visceral adiposity: A systematic review and meta-analysis of long-term randomized controlled trials." *Mayo Clinic Proceedings*, 88(10), 1088-1103.

Sex Hormone Binding Globulin (SHBG)

- **Ding, E. L., et al. (2009).** "Sex hormone-binding globulin and risk of type 2 diabetes in women and men." *New England Journal of Medicine*, 361(12), 1152-1163.
- **Selva, D. M., et al. (2007).** "Monosaccharide-induced lipogenesis regulates the human hepatic sex hormone-binding globulin gene." *Journal of Clinical Investigation*, 117(12), 3979-3987.

Estrogen & Metabolic Function

- **Mauvais-Jarvis, F., et al. (2013).** "The role of estrogens in control of energy balance and glucose homeostasis." *Endocrine Reviews*, 34(3), 309-338.

18. MEDICATION-INDUCED METABOLIC DISRUPTION

Episodes: "Medications That Can Cause Metabolism Problems"

Steroid-Induced Metabolic Effects

- **Schäcke, H., et al. (2002).** "Mechanisms involved in the side effects of glucocorticoids." *Pharmacology & Therapeutics*, 96(1), 23-43.
- **Pereira, R. M., & Freire de Carvalho, J. (2011).** "Glucocorticoid-induced myopathy." *Joint Bone Spine*, 78(1), 41-44.

Birth Control & POMC Pathway Suppression

- **Sitruk-Ware, R. (2006).** "New progestagens for contraceptive use." *Human Reproduction Update*, 12(2), 169-178.
- **Notelovitz, M. (2006).** "Androgen effects on bone and muscle." *Fertility and Sterility*, 85(6), 1697-1701.

Antidepressant Weight Gain Mechanisms

- **Serretti, A., & Mandelli, L. (2010).** "Antidepressants and body weight: a comprehensive review and meta-analysis." *Journal of Clinical Psychiatry*, 71(10), 1259-1272.

19. WEIGHT PLATEAUS & METABOLIC ADAPTATION

Episodes: "Mailbag: Metabolism Myths, Plateaus, and More"

Normal Weight Loss Trajectories

- **Heymsfield, S. B., et al. (2012).** "Weight loss composition is one-fourth fat-free mass: a critical review and critique of this widely cited rule." *Obesity Reviews*, 13(6), 531-540.

Plateau Mechanisms

- **Hall, K. D., & Chow, C. C. (2011).** "Why is the 3500 kcal per pound weight loss rule wrong?" *International Journal of Obesity*, 35, 1243-1244.

- **Thomas, D. M., et al. (2014).** "Time to correctly predict the amount of weight loss with dieting." *Journal of the Academy of Nutrition and Dietetics*, 114(6), 857-861.
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20. MECHANICAL EATING CONCEPTS

Episodes: "Mailbag: Your Questions Answered" • "Metabolic Meds: What? Again?"

Regular Feeding Patterns & Metabolic Health

- **Bellisle, F., et al. (1997).** "Meal frequency and energy balance." *British Journal of Nutrition*, 77(S1), S57-S70.
- **Ohkawara, K., et al. (2013).** "Effects of increased meal frequency on fat oxidation and perceived hunger." *Obesity*, 21(2), 336-343.

Appetite Suppression Side Effects Management

- **Lean, M. E., et al. (2018).** "Primary care-led weight management for remission of type 2 diabetes (DiRECT): an open-label, cluster-randomized trial." *Lancet*, 391(10120), 541-551.
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This reference list provides scientific evidence specifically supporting the biological mechanisms, hormonal pathways, and clinical concepts discussed throughout Fat Science podcast episodes. Each citation corresponds to specific claims and explanations presented by Dr. Emily Cooper and her co-hosts.