БЕЛЕЖКИ КЪМ

ЖЕНИТЕ, ХРАНАТА И ХОРМОНИТЕ на д-р Сара Готфрид

ВЪВЕДЕНИЕ: ЕЗИКЪТ НА ХОРМОНИТЕ

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8. По-високият прием на мазнини при жените е в условията на относително висок прием на въглехидрати (51% от общите дневни калории), а не при кетогенна диета. S. L. Mumford et al., "Dietary Fat Intake and Reproductive Hormone Concentrations and Ovulation in Regularly Menstruating Women," *The American Journal of Clinical Nutrition* 103, no. 3 (2016): 868–77.
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10. Когато става въпрос за здравословна чревна микробиота, това, което има значение, са видът, качеството, количеството и произходът на храната. Чревните бактерии използват хранителните вещества в храната, която консумирате, за основни биологични функции (като регулиране на имунната система) и след това създават изходни метаболитни продукти, които влияят на вашата физиология – включително енергиен

баланс, сигнализиране на глюкозата, възпаление и загуба на мазнини. Едно от най-важните хранителни вещества за здрав микробиом са въглехидратите, достъпни за микробиотата, като пребиотичните фибри. Ключът към успеха на Протокола на Готфрид е да се набавят достатъчни количества от тези специфични въглехидрати, за да се подхранват добрите бактерии.

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12. Имайте предвид, че периодичното гладуване увеличава неврогенезата – продължаващия растеж и развитие на нови нервни клетки (тоест неврони, които допринасят за функции като учене, емоционална регулация и памет). B. Malinowski, "Intermittent Fasting in Cardiovascular Disorders — An Overview," *Nutrients* 11, no. 3 (2019): 673; A. L. Mindikoglu, Intermittent Fasting from Dawn to Sunset for 30 Consecutive Days Is Associated with Anticancer Proteomic Signature and Upregulates Key Regulatory Proteins of Glucose and Lipid Metabolism, Circadian Clock, DNA Repair, Cytoskeleton Remodeling, Immune System, and Cognitive Function in Healthy Subjects," *Journal of Proteomics* 217 (2020): 103645; S. H. Baik et al., "Intermittent Fasting Increases Adult Hippocampal Neurogenesis," *Brain and Behavior* 10, no. 1 (2020): e01444.

13. Периодичното гладуване понижава общия холестерол, LDL холестерола (познат като „лош" холестерол) и серумните триглицериди. Освен това то води до намаляване на натрупването на мазнини в черния дроб и мастните тъкани. G. M. Tinsley et al., "Effects of Intermittent Fasting on Body Composition and Clinical Health Markers in Humans," *Nutrition Reviews* 73, no. 10 (2015): 661–74; A. Bener et al., "Effect of Ramadan Fasting on Glycemic Control and Other Essential Variables in Diabetic Patients," *Annals of African Medicine* 17, no. 4 (2018): 196; A. R. Rahbar et al., "Effects of Intermittent Fasting During Ramadan on Insulin-like Growth Factor-1, Interleukin 2, and Lipid Profile in Healthy Muslims," *International Journal of Preventive Medicine* 10, no. 7 (2019): 1–6; S. Ebrahimi et al., "Ramadan

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1. ИСТИНАТА ЗА ХОРМОНИТЕ, ЖЕНИТЕ И ТЕГЛОТО

1. Емили Хукър, моят изключителен акупунктурист, е стигнала до следните прозрения за традиционната китайска медицина (ТКМ) и хормоните при жените: „Макар текстовете на традиционната китайска медицина да не признават изрично перименопаузата, смята се, че женският жизнен цикъл протича на седемгодишни фази, а 42 години е възрастта, в която shao yang (жлъчния мехур, свързан с черния дроб) започва да запада. При все това в ТКМ също така се твърди, че косата на жената побелява в тази фаза, което изглежда отживелица и потенциално основано на начина на живот. Точно както пишеш, че кортизоловата дисрегулация е в основата на много модели, същото може да се каже и за стагнацията на чернодробната енергия чи и да, въздишането определено е индикация, че има компонент на такава стагнация.

   С течение на времето стагнацията на чернодробната енергия чи има потенциал да причини множество други дисбаланси, често започващи

с дефицит на чи в далака. Това може да е в основата на различни метаболитни проблеми, макар и рядко като единствена диагноза. Така или иначе това няма отношение към точността на оценката ти за Мелиса, при която със сигурност има стагнация на чернодробната енергия чи. Между другото в момента имам 44-годишна пациентка с почти идентична картина. Нивата на кортизола ѝ са високи, прогестеронът и тестостеронът са ниски, щитовидната жлеза е недостатъчно активна и тя също е качила около 9 – 10 килограма през последната година. Нейната диагноза според ТКМ е стагнация на чернодробната енергия чи с дефицит на чи и ян в далака, което води до повишаване на влагата в организма.“ За да научите повече от Емили, отидете на следния интернет адрес: emilyhookeracupuncture.com.

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3. ТЕСТОСТЕРОНЪТ НЕ Е САМО ЗА МЪЖЕ

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5. КАК ДА ЗАПОЧНЕТЕ И КАКВО ДА ЯДЕТЕ

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2. L. R. Squire et al., "Conscious and Unconscious Memory Systems," *Cold Spring Harbor Perspectives in Biology* 7, no. 3 (2015): a021667; J. Goodman et al., "Memory Systems and the Addicted Brain," *Frontiers in Psychiatry* 7 (2016): 24; M. M. Torregrossa et al., "Neuroscience of Learning and Memory for Addiction Medicine: From Habit Formation to Memory Reconsolidation," *Progress in Brain Research* 223 (2016): 91–113; J. Goodman et al., "The Dorsolateral Striatum Selectively Mediates Extinction of Habit Memory," *Neurobiology of Learning and Memory* 136 (2016): 54–62; L. Mang et al., "The Influence of Mood and Attitudes Towards Eating on Cognitive and Autobiographical Memory Flexibility in Female University Students," *Psychiatry Research* 269 (2018): 444–49.
3. E. Patrono et al., "Transitionality in Addiction: A 'Temporal Continuum' Hypotheses Involving the Aberrant Motivation, the Hedonic Dysregulation, and the Aberrant Learning," *Medical Hypotheses* 93 (2016): 62–70.
4. V. Voon, "Cognitive Biases in Binge Eating Disorder: The Hijacking of Decision Making," *CNS Spectrums* 20, no. 6 (2015): 566–73.
5. J. Goodman et al., "Enhancing and Impairing Extinction of Habit Memory Through Modulation of NMDA Receptors in the Dorsolateral Striatum," *Neuroscience* 352 (2017): 216–25.
6. Mang et al., "The Influence of Mood and Attitudes."
7. За цели храни вземете общите въглехидрати и извадете фибрите (в грамове), за да определите нетните си въглехидрати. За преработени храни извадете фибрите (в грамове) и захарния алкохол (в грамове от общите въглехидрати в грамове), за да определите нетните си въглехидрати.
8. Лабораторните изследвания за инсулинова резистентност отчитат както нарушена глюкоза на гладно, така и нарушен глюкозен толеранс. Това са диагностичните критерии за оптимално състояние, гранично състояние, преддиабет и диабет, които използвам в медицинската си практика въз основа на най-добрите доказателства. Трябва да знаете обаче, че много организации, от Американската диабетна асоциация до Световната здравна организация, използват критерии, за които липсва консенсус.
    - Глюкоза на гладно: оптимална 70 – 85, гранична 86 – 99, преддиабет 100 – 125, диабет над 126 mg/dL.
    - Непрекъснат глюкозен монитор с оптимална средна глюкоза под 100 и стандартно отклонение, по-малко от 15 mg/dL (според мен,

въз основа на клиничния ми опит и предпочитания от мен начин за диагностициране на проблеми с инсулина).

- Постпрандиална глюкоза 2 часа след хранене 140 – 199 mg/dL, диабет над 199 mg/dL.
- Оптимален гликиран хемоглобин A1C по-малко от 5%, граничен 5,0 – 5,6%, преддиабет 5,7 –6,4%, диабет над 6,4%.

World Health Organization, "Definition and Diagnosis of Diabetes Mellitus and Intermediate Hyperglycaemia: Report of a WHO/IDF Consultation" (2006):1–50; N. Bansal, "Prediabetes Diagnosis and Treatment: A Review," *World Journal of Diabetes* 6, no. 2 (2015): 296; W. C. Y. Yip et al., "Prevalence of Pre-Diabetes Across Ethnicities: A Review of Impaired Fasting Glucose (IFG) and Impaired Glucose Tolerance (IGT) for Classification of Dysglycaemia," *Nutrients* 9, no. 11 (2017): 1273; Z. Punthakee et al., "Classification and Diagnosis of Diabetes, Prediabetes, and Metabolic Syndrome," *Canadian Journal of Diabetes* 42 (2018): S10– 15; American Diabetes Association, "2. Classification and Diagnosis of Diabetes: Standards of Medical Care in Diabetes — 2018," *Diabetes Care* 41, no. 1 (2018): S13–27.

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10. Този онлайн калкулатор се предлага от Центъра за контрол на заболяванията: https://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/english_bmi_calculator/bmi_calculator.html. Достъпно на 20 май 2020 година.
11. Когато обучавам пациент относно Протокола на Готфрид, питам дали иска основния, или усъвършенствания подход. За хора, които имат достъп до съответните устройства, може да бъде полезно измерването на по-разширени показатели, включително следните:
    - Ежедневно измерване на кръвна захар и кетони (чрез изследване с убождане на пръста), за да се изчисли глюкозо-кетонния индекс.
    - Непрекъснат мониторинг на глюкозата.
    - Bluetooth кантар за състава на тялото.
    - Метаболитна скорост в покой.
    - Изпълнение на упражнения за оценка на аеробната издръжливост като VO2 max – показва максималната скорост на консумация на кислород, който тялото ни е способно да абсорбира, транспортира и консумира.
12. Едно от най-добрите описания на кетогенното съотношение е налично в тази книга: Jacob Wilson and Ryan Lowery, The Ketogenic Bible (Las Vegas: Victory Belt, 2017), 39–40.

13. Протеините са смесени в техния кетогенен ефект. Защо? Някои градивни елементи на протеините, наречени аминокиселини, са кетогенни, докато други са антикетогенни. Примери за кетогенни аминокиселини са левцин и лизин. Пример за антикетогенна аминокиселина е аланинът.
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16. S. H. Duncan et al., "Reduced Dietary Intake of Carbohydrates by Obese Subjects Results in Decreased Concentrations of Butyrate and Butyrate-Producing Bacteria in Feces," *Applied and Environmental Microbiology* 73, no. 4 (2007): 1073–78.
17. За да изчислите нетните въглехидрати в преработените храни, извадете фибрите и количеството на захарните алкохоли. Например за една трета от средно авокадо това значи 4 грама въглехидрати, по-малко от 3 грама фибри (4 грама – 3 грама = 1 грам), тоест 1 грам нетни въглехидрати. За любимия ми сладкиш това са общо 13 грама въглехидрати на всяка порция брауни, по-малко от 5 грама фибри, по-малко от 7 грама захарни алкохоли (в този случай еритритол и алулоза), тоест 1 грам нетни въглехидрати.
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21. A. Dagfinn et al., "Nut Consumption and Risk of Cardiovascular Disease, Total Cancer, All-Cause and Cause-Specific Mortality: A Systematic Review and Dose-Response Meta-Analysis of Prospective Studies," *BMC Medicine* 14, no. 1 (2016): 207; C. Guo-Chong et al., "Nut Consumption in Relation to All-Cause and Cause-Specific Mortality: A Meta-Analysis 18 Prospective Studies," *Food & Function* 8, no. 11 (2017): 3893–905.
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Chain Triglyceride Oil Consumption as Part of a Weight Loss Diet Does Not Lead to an Adverse Metabolic Profile When Compared to Olive Oil," *Journal of the American College of Nutrition* 27, no. 5 (2008): 547–52.

23. K. Mumme et al., "Effects of Medium-Chain Triglycerides on Weight Loss and Body Composition: A Meta-Analysis of Randomized Controlled Trials," *Journal of the Academy of Nutrition and Dietetics* 115, no. 2 (2015): 249–63.
24. T. Maher et al., "A Comparison of the Satiating Properties of Medium-Chain Triglycerides and Conjugated Linoleic Acid in Participants with Healthy Weight and Overweight or Obesity," *European Journal of Nutrition* (2020): 1–13.
25. Ето допълнителни подробности за MCT:
    MCT маслото увеличава кетоните с 19% и може да помогне за превключване на метаболитния превключвател от изгаряне на глюкоза към изгаряне на мазнини.(C. Vandenberghe et al., "Medium-Chain Triglycerides Modulate the Ketogenic Effect of a Metabolic Switch," *Frontiers in Nutrition* 7 (2020): 3–6.
    Освен това в ограничени проучвания на болестта на Алцхаймер някои показатели за когнитивните способности се подобряват с добавяне на MCT масло към диетата (K. I. Avgerinos et al., "Medium- Chain Triglycerides Induce Mild Ketosis and May Improve Cognition in Alzheimer's Disease: A Systematic Review and Meta-Analysis of Human Studies," *Ageing Research Reviews* [2019]: 101,001), а използването на кетоните от мозъка може да се удвои. (E. Croteau et al., "Ketogenic Medium-Chain Triglycerides Increase Brain Energy Metabolism in Alzheimer's Disease," *Journal of Alzheimer's Disease* 64, no. 2 [2018]: 551–61).
    MCT маслото също „говори" с хормоните и може да ви помогне да станете по-чувствителни към инсулина и да намалите адипонектина си в рамките на шест седмици, поне според едно малко неконтролирано проучване (D. D. Thomas et al., "Effects of Medium-Chain Triglycerides Supplementation on Insulin Sensitivity and Beta Cell Function: A Feasibility Study," *PLoS One* 14, no. 12 (2019).
26. Смята се, че механизмът на увреждане е чрез повишаване на бактериалните токсини от червата, известно като ендотоксемия, пет до осем часа, след като го изядете. P. Dandona et al., "Macronutrient Intake Induces Oxidative and Inflammatory Stress: Potential Relevance to Atherosclerosis and Insulin Resistance," *Experimental & Molecular Medicine* 42, no. 4 (2010): 245–53; F. Biobaku et al., "Macronutrient- Mediated Inflammation and Oxidative Stress: Relevance to Insulin Resistance, Obesity, and Atherogenesis," *The Journal of Clinical Endocrinology & Metabolism* 104, no. 12 (2019): 6118–28.
27. Когато консумирате наситени или трансмазнини заедно с рафинирани въглехидрати, механизмът на увреждане е комбинация от оксидативен стрес, неразрешено възпаление, ендотоксемия, повишена експресия на SOCS-3 и TLR4, което блокира IRS-1 и PI3K пътищата, предизвиквайки

инсулинова резистентност (според лична комуникация с д-р Марк Хюстеън и Dandona et al., "Macronutrient Intake").

28. Y. Bao et al., "Association of Nut Consumption with Total and Cause-Specific Mortality," *The New England Journal of Medicine* 369, no. 21 (2013): 2001–11.
29. C. Smith-Spangler et al., "Are Organic Foods Safer or Healthier Than Conventional Alternatives? A Systematic Review," *Annals of Internal Medicine* 157, no. 5 (2012): 343–66; S. Watson, "Organic Food No More Nutritious Than Conventionally Grown Food," *Harvard Women's Health Watch*, September 5, 2012, https:// www.health.harvard.edu/blog/organic-foodno-more-nutritious-than-conventionally-grown-food-201209055264. Достъпно на 6.05.2020 година.
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34. Diabetes Teaching Center at the University of California, San Francisco, "Blood Sugar & Other Hormones," https://dtc.ucsf.edu/types-of-diabetes/type1/understanding-type-1-diabetes/how-the-body-processes-sugar/blood-sugar-other-hormones/
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37. Вашият черен дроб обработва токсините на две фази. В първата фаза той превръща мастноразтворимите токсини във водоразтворими вещества. В края на втората фаза черният дроб отделя тези водоразтворими токсини чрез урината, изпражненията, потта и други телесни течности. В протокола за детоксикация този двуетапен процес трябва да се управлява в обратен ред: оптимизиране на фаза II, преди да се

насочат усилията към фаза I. Това е една от причините програмите за детоксикация и „прочистване“ да са противоречиви и да е възможно да ви накарат да се чувствате зле. Ако токсините се отстраняват от тъканите с по-висока скорост, отколкото се изхвърлят от тялото, това кара човек да се чувства ужасно и дори може да има тежки последици.

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6. ДЕТОКСИКАЦИЯ, СЪОБРАЗЕН С ЦИРКАДНИТЕ РИТМИ ФАСТИНГ И СПРАВЯНЕ С ЕВЕНТУАЛНИ ПРОБЛЕМИ

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