# Afhængig?

Hvorfor vi får cravings og hvad vi kan gøre for at blive fri.



### "Hvis du får så dårlig samvittighed efter du har spist kage, hvorfor lader du så ikke bare være?"

- "Ernæringsekspert" på facebook, 2014



### Ny forskning: Jo, sukker stimulerer dig mere end kokain



### ILLUSTRERET VIDENSKAB

MENNESKET - HJERNEN

### Sukker er narko for din hjerne

Når du indtager det, spreder en følelse af lykke og glæde sig i kroppen – og du vil hav mere. Det lyder som narkotika, men effekten kommer også fra noget, vi indtager hve dag: sukker.



De hvide sukkerkrystaller og kokain har ikke kun udseendet til fælles – de påvirker også hjernen på samme måde

Er sukker mere vanedannende end kokain?

Skrevet 21-11-2014 af Alun Biggart - Print - Send til en ven 
Synes godt

G

SHARES









Ja, det er den chokerende konklusion på et forskningsstudie: Raffineret sukker er langt mere vanedannende end kokain – én af de mest vanedannende og sundhedsskadelige ingredienser til dags dato. Så betegnelsen "sukkerrus" er måske ikke langt fra sandheden!



## Kan man være afhængig af sukker?







### Sugar addiction: the state of the science

Margaret L. Westwater, Paul C. Fletcher & Hisham Ziauddeen 

✓

European Journal of Nutrition 55, 55–69 (2016) Cite this article 138k Accesses 62 Citations 938 Altmetric Metrics

Abstract

[F]indings from the animal literature suggest that addiction-like behaviours ... likely arise from intermittent access to sweet tasting or highly palatable foods, not the neurochemical effects of sugar.

med the addictive potential of sugar by contrasting evidence from the

animal and human neuroscience literature on drug and sugar addiction.

### Results

We find little evidence to support sugar addiction in humans, and findings from the animal literature suggest that addiction-like behaviours, such as bingeing, occur only in the context of intermittent access to sugar. These behaviours likely arise from intermittent access to sweet tasting or highly palatable foods, not the neurochemical effects of sugar.

### Conclusion

Given the lack of evidence supporting it, we argue against a premature incorporation of sugar addiction into the scientific literature and public policy recommendations.



### Luk øjnene og forestil dig noget, du ofte craver...







### Sukker er ikke en fællesnævner for de fødevarer vi føler os afhængige af.





Contents lists available at ScienceDirect

### **Appetite**





Eating dependence and weight gain; no human evidence for a 'sugaraddiction' model of overweight



C. Rob Markus a, \*, Peter J. Rogers b, Fred Brouns c, Robbie Schepers a

a Faculty of Psychology and Neuroscience; Dept of Neuropsycho b Nutrition and Behaviour Unit Sch

### "[S]ugary foods contribute minimally to 'food dependence' and increased risk of weight gain."

gain. Claims about the addictiveness of sugar ndings from few animal studies, whereas there is a lack of direct human

evidence for symptoms of sugar-related substance dependence. The current study examined in a large sample of human participants whether foods mainly containing sugar in particular might cause 'addiction-like' problems that meet clinical DSM criteria for substance dependence, and, also whether in turn this relates to body weight and negative affectivity (depressed mood).

Methods: In a cross-sectional study, n = 1495 university students from a variety of faculties were assessed for DSM-related signs of food addiction for particular food categories (YFAS), and, also BMI and negative affectivity.

Results: Results revealed that from the total sample, 95% experienced at least one symptom of food dependence and 12.6% met the YFAS classification for 'food addiction' as related to DSM-IV criteria. The majority of respondents experienced these problems for combined high-fat savoury (30%) and high-fat sweet (25%) foods, whereas only a minority experienced such problems for low-fat/savoury (2%) and mainly sugar-containing foods (5%). Overweight correlated only with addictive-like problems for high-fat savoury and high-fat sweet foods (P < 0.0001), while this was not found for foods mainly containing

Conclusion: The current findings indicate that sugary foods contribute minimally to 'food dependence' and increased risk of weight gain. Instead, they are consistent with the current scientific notion that food energy density, and the unique individual experience of eating, plays an important role in determining the reward value of food and promoting excessive energy intake.

© 2017 Elsevier Ltd. All rights reserved.

Keywords: Food addiction Sugar

line 19 March 2017

YFAS

A R Article Receiv

Receive

5 Janua

Accepte

BMI

Obesity

Eating behaviour



## Den største fællesnævner er forarbejdningsgraden.

## Men er vi så afhængige af ultraforarbejdet mad?



### Review

"Eating addiction", rather than "food addiction", better captures addictive-like eating behavior

Johannes Hebebrand a, Özgür Albayrak a, Roger Adan b, Jochen Antel a, Carlos Dieguez c, d, Johannes de Jong b, Gareth Leng e, John Menzies e a Ma, Julian G. Mercer f, Michelle Murphy f, Geoffrey van der Plasse b, Suzanne L. Dickson 9

### 

https://doi.org/10.1016/j.neubiorev.2014.08.016

Spiseafhængighed beskriver afhængighedslignende spiseadfærd bedre end madafhængighed – et begreb, der fører tankerne over på en stofafhænighed.

specific macronutrients is lacking in humans.

- "Eating addiction" describes a behavioral addiction.
- An "eating addiction" is not necessarily associated with obesity.
- Obesity prevention strategies should focus on "eating addiction".
- Consider "eating addiction" as a disorder in DSM-5 "Non-Substance-Related Disorders".



# Spiseafhængighed er en adfærdsafhængighed, ikke en stofafhængighed.



### Afhængighed.

### Essentielle elementer:

- 1. Intense cravings efter noget.
- 2. Kontroltab over brugen af det.
- 3. Fortsat brug trods negative konsekvenser.
- 4. Et stærkt ønske om at stoppe
  - og måske adskillige fallerede forsøg.



# Centralt for alle afhængigheder er cravings.



### Cravings er trangen, tilskyndelsen, fantasien, forventningen og følelsen af, at man mangler noget.



Psychological Review 2005, Vol. 112, No. 2, 446-467 Copyright 2005 by the American Psychological Association

### Imaginary Relish and Exquisite Torture: The Elaborated Intrusion Theory of Desire

David J. Kavanagh University of Queensland Jackie Andrade and Jon May University of Sheffield

The authors argue that human desire involves conscious cognition that has strong affective connotation and is potentially involved in the determination of appetitive behavior rather than being epiphenomenal to it. Imrusive thoughts about appetitive targets are triggered automatically by external or physiological cues and by cognitive associates. When intrusions elicit significant pleasure or relief, cognitive elaboration usually esues. Elaboration competes with concurrent cognitive tasks through retrieval of target-related information and its retention in working memory. Sensory images are especially important products of intrusion and elaboration because they simulate the sensory and emotional qualities of target acquisition. Desire images are momentarily rewarding but amplify awareness of somatic and emotional deficits. Effects of desires on behavior are moderated by competing incentives, target availability, and skills. The theory provides a coherent account of existing data and suggests new directions for research and treatment.

The imaginary relish is so sweet That it enchants my sense.

-Shakespeare, Troilus & Cressida, Act 3, Scene 2

Here you are, innocently reading a psychology journal, and an article suddenly mentions someone drinking a cup of excellent coffee at a sidewalk café on a sunny Sunday morning. Chances are that you immediately imagine how good it would be to have a cup yourself. Maybe you imagine the smell of the freshly ground coffee beans, the smell and taste of the coffee, and perhaps even the sound of the grinder and the bubble and steam of the espresson machine. If you do not especially enjoy coffee or have just finished a cup, this image may have little appeal. But if you would really enjoy a cup of coffee right now, the image has a pleasurable piquancy—a tantalizing enchantment that like a tickle to your foot, moves easily to a sense of torture if the desire cannot be fulfilled. From its inception, the thought captures your attention. It has strong emotive power, and there is a sense that it triggers action. You may even feel unable to continue to read this article until you get a cup.

What are the essential elements of this subjective experience? Our impression is that they include the intrusive and often unexpected nature of the initial thought, the imagery of the coffee and of drinking it, and the pleasure and torture that image brings. Once begun, it is difficult to stop thinking about it—in fact, it is difficult to think about anything else. If the affective impact of the desire is

David J. Kavanagh, School of Medicine, Faculty of Health Sciences, University of Queensland, Herston, Queensland, Australia; Jackie Andrade and Jon May, Department of Psychology, University of Sheffield, Sheffield, United Kingdom.

We thank Albert Bandura, Paschal Sheeran, Sharon Dawe, Natalie Shockley, Ross Young, W. Jake Jacobs, and Craig Santerre for their comments on earlier versions of this article.

Correspondence concerning this article should be addressed to David J. Kavanagh, School of Medicine, Faculty of Health Sciences, University of Queensland, K Floor, Mental Health Building, Royal Brisbane Hospital, Herston Qld 4029, Australia. E-mail: dkavanagh@uq.edu.au particularly strong, its fulfillment may seem imperative, although of course it is not inevitable.

In this article, we describe an elaborated intrusion (EI) theory of desires, which embodies these key aspects of the subjective phenomena as well as encompassing the wide range of related empirical evidence. As its name suggests, the theory distinguishes between associative processes that trigger intrusive thoughts about an appetitive target and the controlled processes of cognitive elaboration that tend to follow those thoughts that have stronger affective links. The processing priority provided to the elaboration is responsible for the interference with other cognitive tasks. The theory holds that emotive imagery and associated sensations are especially important in craving because somatosensory links contribute a particular piquancy and motivational power to the experience. Although the theory acknowledges the function of target salience in motivation (Robinson & Berridge, 1993), it highlights the affective nature of desires and draws attention to the duality of those affective reactions (i.e., the relish and torture in our article's title). In contrast to some who have concluded that craving is epiphenomenal (e.g., Tiffany, 1990), we argue that desires represent a strong motivating force, albeit one that is moderated by other factors such as competing desires, skills, or availability (e.g., we want to avoid being kept awake or are out of coffee). Our theory is unashamedly cognitive, with a focus on human motivation, but consistent with current neuroscientific findings from brain imaging and animal research.

In what follows, we define desire and distinguish it from its antecedents and consequences. We then provide an overview of the theory and work through its key propositions, examining the evidence for each, including evidence from our own laboratory. We complete the article with research predictions, including some implications for the treatment of dysfunctional desires.

### What Do We Mean by Desire?

A coherent theory of desire requires clarity of definition and a distinction of desires from their antecedents, correlates, and consequences. It is especially important that we clarify these concepts

### Forestillet forløsning bliver til tortur.



# Cravings er forventningens "glæde".



# Cravings er et ubehag. En smertelig følelse af mangel.



# En indre uro, der driver os til at søge ro.



# Trangen bliver en drivkraft – men kun til at stille trangen.



### Hvad får vi ud af at gi' efter? Hvad er belønningen?







## Cravings kræver ikke et stof udefra.



## Cravings drives af dopamin.



## Dopamin motiverer til at fantasere.



## Hjernen overtages af tanker om målet.



## Når man craver, kan man ikke tænke på andet.



## Trangen giver tilladende tanker mere "tyngde".



# Vi kan ikke give efter, før vi har givet os selv tilladelse.



## Forbudstanker lægger kimen til cravings.



## At fantasere om noget stiller ikke trangen.

Det forstærker den.



## Større trang betyder ikke større nydelse.



# Afhængighed drives dermed ikke af nydelse, men af forventningen om nydelse.



## Så hvorfor spiser vi kage, når vi ved vi får dårlig samvittighed bagefter?



# Fordi vi har to forskellige "hjerner" før og efter vi er faldet i.



## Drop diskussionen. Undersøg lysten.



### Drop hammeren. Undersøg årsagerne.



## Drop kompensationen. Lyt til dine behov.



# Det, der styrer os, findes ikke i maden, men i vores eget hoved.





madroinstituttet.dk mortenelsøe.dk



@morten.elsoe
@madroinstituttet



**Detox din hjerne**Slut med forbudt
Et åbent sind?



