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Sørensen, Mette Rosenlund; Matthiessen, Jeppe; Holm, L.; Knudsen, Vibeke Kildegaard; Andersen, Elisabeth Wreford; Tetens, Inge

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# Optimistic self-assessments of unhealthy diets are associated with positive indicators of health and health behaviours in Danish adults

Sørensen MR<sup>1</sup>, Matthiessen J<sup>1</sup>, Holm L<sup>2</sup>, Knudsen VK<sup>1</sup>, Andersen EW<sup>3</sup>, Tetens I<sup>1</sup>

<sup>1</sup> National Food Institute, Technical University of Denmark

<sup>2</sup> Department of Food and Resource Economics, University of Copenhagen

<sup>3</sup> Department of Applied Mathematics and Computer Science, Technical University of Denmark

## Background and aim

Optimistic self-assessments of unhealthy diets have been suggested as a potential barrier to the promotion of healthier eating practices. The aim of this study was to examine the extent to which Danish adults with unhealthy diets assess the healthiness of their diets optimistically and to examine socio-demographic, health and behaviour characteristics associated with this optimistic self-assessment.

## Methods

- Cross sectional analysis including 3014 adults (18-75 y) (M:1464, W:1550)
- Data derived from The Danish National Survey of Diet and Physical Activity 2011-2013 (seven-days pre-coded food diaries, structured face-to-face interviews, anthropometric measures)
- A diet index on saturated fat, added sugar, fruits and vegetables, fish and wholegrain was applied to divide individuals into tertiles of healthy, somewhat healthy and unhealthy diets
- Estimated diet quality was compared with individuals' self-assessed diet healthiness (to a high degree healthy, to some degree healthy and not healthy)
- Optimistic self-assessment was defined as being among the lowest tertile 'unhealthy diets' and assessing own diets as healthy to a high degree (highly optimistic) and to some degree (somewhat optimistic)
- Logistic regression models were used to examine characteristics associated with optimistic self-assessments of unhealthy diets

## Results

Among individuals with unhealthy diets, 13 % assessed their diets as healthy to a high degree, 42 % to some degree and 45 % were realistic about their unhealthy diets. Optimistic self-assessments of unhealthy diets were associated with increasing age, excellent self-rated health, normal weight and a moderate physical activity level.

**Table 1. Factors significantly associated with optimistic self-assessments among adults with unhealthy diets<sup>a</sup> (diet index score <3.01) (outcome variable: highly optimistic vs. realistic) (Total N=3014, active n=497)**

		OR	95% CI	P-value <sup>b</sup>
<b>Age</b>	18-24	0.05	0.02-0.15	<0.001
	25-44	0.14	0.07-0.27	<0.001
	45-64	1.00		
	65-75	2.84	1.42-5.69	0.003
	<b>Self-rated health</b>			
	Excellent	1.00		
	<b>Very good</b>	<b>0.36</b>	<b>0.19-0.69</b>	<b>0.002</b>
	<b>Good</b>	<b>0.34</b>	<b>0.17-0.65</b>	<b>0.001</b>
	Fair/poor	0.56	0.24-1.30	0.177
<b>Weight status</b>				<b>&lt;0.001</b>
	Normal weight <sup>c</sup> (BMI <25)	1.00		
	<b>Overweight (BMI 25 - &lt;30)</b>	<b>0.40</b>	<b>0.23-0.71</b>	<b>0.002</b>
	<b>Obese (BMI ≥30)</b>	<b>0.11</b>	<b>0.05-0.24</b>	<b>&lt;0.001</b>
<b>Physical activity, leisure time</b>				<b>0.037</b>
	Vigorous	0.49	0.14-1.78	0.281
	Moderate	1.00		
	<b>Light</b>	<b>0.48</b>	<b>0.27-0.85</b>	<b>0.011</b>
	<b>Sedentary</b>	<b>0.36</b>	<b>0.15-0.83</b>	<b>0.017</b>

<sup>a</sup> Included factors: gender, age, education, income, weight status, abdominal weight status, self-reported high cholesterol, self-rated health, slimming diet, self-assessed leisure time physical activity, smoking habits. Age and education were kept in the model

<sup>b</sup> Tested using logistic regression (P<0.05)

<sup>c</sup> 1 % was underweight (BMI <18.5)

## Conclusions

A considerable percentage of Danish adults with unhealthy diets were optimistic about the healthiness of their diets. This tendency was more likely among older adults and adults with positive indicators of health and health behaviours. In the promotion of dietary health, it is important to acknowledge differences in dietary health assessments among lay people and nutrition professionals. Possible reasons for optimistic self-assessments should be further explored.

	Self-assessed diet healthiness		
	To a high degree healthy	To some degree healthy	Not healthy
<b>Estimated diet index score, lowest tertile</b>	Highly optimistic self-assessment	Somewhat optimistic self-assessment	Realistic self-assessment

**Figure 1. Classification of self-assessments of unhealthy diets**

