EETVRAGENLIJST VOOR KINDEREN [1]

Naam: .....….....Leeftijd.....….....

Jongen / Meisje (omcirkel wat je bent)…….Geboortedatum……..……..

Datum van invullen (vandaag).....Klas.....….....

Identificatienummer ☐☐☐☐

INSTRUCTIE

De bedoeling van deze vragenlijst is een beter zicht te krijgen in jouw eetgewoonten en opvattingen.

Op de volgende bladzijden staan er allerlei vragen die je goed moet doorlezen. Bij elke vraag kun je kiezen tussen twee of meer antwoorden. Per vraag mag je maar in één hokje een kruisje zetten. Je moet dus het antwoord kiezen dat het best voor jou past. Als je een bladzijde ingevuld hebt, ga je gewoon met de volgende verder. Er zijn geen goede of foute antwoorden, dus probeer zo eerlijk mogelijk te zijn in je antwoorden.

Sla alsjeblieft geen vragen over.

Alle vragen gaan over de ***afgelopen 28 dagen (4 weken)***. Dit is niet zo gemakkelijk. Probeer toch zo nauwkeurig mogelijk het antwoord te schatten. Als geheugensteun kan je ***de activiteitenkalender*** met daarop de aantekeningen van jou bezigheden erbij te houden. Ga vanaf vandaag 28 dagen terug en duid deze dagen aan op de kalender.

VOORBEELD:

Je hebt je in de afgelopen 28 dagen (vier weken) zestien dagen bang gevoeld, dan vul je het hokje op de volgende manier in:

De afgelopen vier weken....	**0 dagen**	**1-5 dagen**	**6-12 dagen**	**13-15 dagen**	**16-22 dagen**	**23-27 dagen**	**28 dagen**
Heb je je bang gevoeld	☐	☐	☐	☐	☒	☐	☐

	Hoeveel dagen van de afgelopen vier weken...	**0 dagen**	**1-5 dagen**	**6-12 dagen**	**13-15 dagen**	**16-22 dagen**	**23-27 dagen**	**28 dagen**
1	... heb je met opzet geprobeerd minder te eten dan je eigenlijk wou, om je lichaamsvormen of gewicht te veranderen?	☐	☐	☐	☐	☐	☐	☐
2	... heb je, terwijl je wakker was, 8 uren of langer achter elkaar niets gegeten om je lichaamsvormen of gewicht te veranderen?	☐	☐	☐	☐	☐	☐	☐
3	... heb je geprobeerd voedsel, dat je lekker vindt, niet te eten om je lichaamsvormen of gewicht te veranderen?	☐	☐	☐	☐	☐	☐	☐
4	... heb je geprobeerd om bepaalde regels in verband met eten te volgen om je gewicht of lichaamsvormen te veranderen? Bijvoorbeeld een welbepaalde hoeveelheid voedsel, bepaald aantal calorieën of regels over wat en wanneer je van jezelf moest eten.	☐	☐	☐	☐	☐	☐	☐
5	… heb je gewild dat je maag echt helemaal leeg was?	☐	☐	☐	☐	☐	☐	☐
6	... heb je je moeilijk kunnen concentreren op dingen die je graag deed doordat je aan het denken was over voedsel, eten of calorieën? Bijvoorbeeld bij tv-kijken, lezen of computerspelletjes spelen.	☐	☐	☐	☐	☐	☐	☐
7	... heb je schrik gehad om de controle over je eetgedrag te verliezen? Dus schrik dat je niet meer zou kunnen stoppen met eten.	☐	☐	☐	☐	☐	☐	☐
8	... heb je eetbuien gehad? Dus momenten dat je echt teveel gegeten hebt.	☐	☐	☐	☐	☐	☐	☐

	Hoeveel dagen van de afgelopen vier weken...	**0 dagen**	**1-5 dagen**	**6-12 dagen**	**13-15 dagen**	**16-22 dagen**	**23-27 dagen**	**28 dagen**
9	... heb je in het geheim gegeten? (De eetbuien moet je hier niet bij-tellen)	☐	☐	☐	☐	☐	☐	☐
10	... heb je erg gewild dat je buik helemaal plat was?	☐	☐	☐	☐	☐	☐	☐
11	... heb je je moeilijk kunnen concentreren op dingen die je graag deed doordat je aan het denken was over je <u>lichaam of gewicht</u>? Bijvoorbeeld bij tv-kijken, lezen of computerspelletjes spelen.	☐	☐	☐	☐	☐	☐	☐
12	... ben je bang geweest om in gewicht aan te komen? Dus, om dikker of zwaarder te worden.	☐	☐	☐	☐	☐	☐	☐
13	... heb je je zwaar gevoeld?	☐	☐	☐	☐	☐	☐	☐
14	... heb je erg gewild om gewicht te verliezen?	☐	☐	☐	☐	☐	☐	☐

Over de afgelopen vier weken (28 dagen)

15 <u>Hoe vaak</u> heb je je in de afgelopen 4 weken schuldig gevoeld nadat je gegeten had? Dus, dat je het gevoel had dat je iets verkeerd gedaan had voor je lichaamsvormen of gewicht. (Als je eetbuien hebt gehad moet je ze er niet bijtellen)

Kruis aan wat het best voor jou past.

☐ **nooit** een schuldgevoel na het eten
☐ **bijna geen enkele keer** een schuldgevoel na het eten
☐ **minder dan de helft** van de keren een schuldgevoel na het eten
☐ **de helft** van de keren een schuldgevoel na het eten
☐ **meer dan de helft** van de keren een schuldgevoel na het eten
☐ **bijna elke keer** een schuldgevoel na het eten
☐ **elke keer** een schuldgevoel na het eten

16 Heb je in de afgelopen vier weken (28 dagen) het gevoel gehad dat je een zeer grote hoeveelheid voedsel had gegeten? Dus, een hoeveelheid eten die andere mensen ook groot zouden vinden?

Kruis aan wat het best voor jou past.
Zo ja, hoeveel keer is dit in de afgelopen vier weken gebeurd?

☐ nee
☐ ja, …. keer

17 Heb je tijdens die momenten dat je echt teveel gegeten had (zie vraag 16) wel eens het gevoel gehad dat je niet meer kon controleren wat en hoeveel je at? Dus, alsof je niet meer kon stoppen met eten nadat je eenmaal begonnen was. Zo ja, hoe vaak?

☐ nee
☐ ja, …. keer

18 Heb je in de afgelopen vier weken wel eens andere momenten gehad, waarin je het gevoel had dat je niet meer kon stoppen met eten en maar daarbij geen abnormale grote hoeveelheid voedsel at? Zo ja, hoe vaak?

☐ nee
☐ ja, …. keer

19 Heb je in de afgelopen vier weken wel eens overgegeven om niet te verdikken of meer te wegen? Zo ja, hoe vaak?

☐ nee
☐ ja, …. keer

20 Heb je in de afgelopen vier weken wel eens medicijnen gebruikt om beter te kunnen plassen of naar de WC te gaan met de bedoeling niet te verdikken of meer te wegen? Zo ja, hoe vaak?

☐ nee
☐ ja, …. keer

21 Heb je de afgelopen vier weken medicijnen gebruikt om je honger te stillen met de bedoeling niet te verdikken of meer te wegen? Zo ja, hoe vaak?

☐ nee
☐ ja, …. keer

22 Heb je de laatste vier weken heel veel gesport om niet te verdikken of meer te wegen? Zo ja, hoe vaak?

☐ nee
☐ ja, …. keer

	In de afgelopen vier weken (28 dagen) ... ***Kruis aan wat het best bij jou past.***	**0 = helemaal niet**	**1 = niet**	**2 = klein beetje**	**3 = tamelijk**	**4 = redelijk**	**5 = erg**	**6 = heel erg**
23	... heeft je gewicht invloed gehad op de manier waarop je over jezelf dacht?	☐	☐	☐	☐	☐	☐	☐
24	... hebben je lichaamsvormen invloed gehad op de manier waarop je over jezelf dacht?	☐	☐	☐	☐	☐	☐	☐
25	... hoe vervelend zou je het vinden als er werd gevraagd aan jou om je in de komend maand één keer in de week te wegen?	☐	☐	☐	☐	☐	☐	☐
26	... ben je ontevreden geweest over je gewicht?	☐	☐	☐	☐	☐	☐	☐
27	... ben je ontevreden geweest over je lichaamsvormen?	☐	☐	☐	☐	☐	☐	☐
28	... heb je je zorgen gemaakt dat andere mensen je zouden zien eten?	☐	☐	☐	☐	☐	☐	☐
29	... heb je je niet op je gemak of verlegen gevoeld bij het zien van je eigen lichaam? Bijvoorbeeld in een spiegel, in een etalageruit, tijdens het uitkleden of tijdens het nemen van een bad of douche.	☐	☐	☐	☐	☐	☐	☐
30	… heb je je niet op je gemak of verlegen gevoeld wanneer andere mensen je lichaam konden zien? Bijvoorbeeld bij het omkleden in gemeenschappelijke kleedhokjes, tijdens het zwemmen of bij het dragen van kleding waarin de vorm van je lichaam goed zichtbaar is.	☐	☐	☐	☐	☐	☐	☐

Heb je gecontroleerd of je bij elke vraag een hokje hebt aangekruist?

Alvast bedankt voor het invullen!

Scoreformulier Eetvragenlijst voor kinderen (EDE-Q)

Naam kind……..…….……Leeftijd.……...……...

Jongen / Meisje……...Geboortedatum..……...

Identificatienummer □□□□

Lijnen (L)
Zorgen over Eten (ZE)

1 – L	0	1	2	3	4	5	6
2 – L	0	1	2	3	4	5	6
3 – L	0	1	2	3	4	5	6
4 – L	0	1	2	3	4	5	6
5 – L	0	1	2	3	4	5	6
6 – ZE	0	1	2	3	4	5	6
7 – ZE	0	1	2	3	4	5	6
9 – ZE	0	1	2	3	4	5	6
15 – ZE	0	1	2	3	4	5	6
28 – ZE	0	1	2	3	4	5	6

Zorgen over gewicht (ZG)
Zorgen over Lichaamsvormen (ZL)

! 11 – ZG/ZL	0	1	2	3	4	5	6
14 – ZG	0	1	2	3	4	5	6
23 – ZG	0	1	2	3	4	5	6
25 – ZG	0	1	2	3	4	5	6
26 – ZG	0	1	2	3	4	5	6
10 – ZL	0	1	2	3	4	5	6
12 – ZL	0	1	2	3	4	5	6
13 – ZL	0	1	2	3	4	5	6
24 – ZL	0	1	2	3	4	5	6
27 – ZL	0	1	2	3	4	5	6
29 – ZL	0	1	2	3	4	5	6
30 - ZL	0	1	2	3	4	5	6

Totaal L:
Totaal ZE:
Totaal ZG:
Totaal ZL:

Gemiddelde L:
Gemiddelde ZE:
Gemiddelde ZG:
Gemiddelde ZL:

EDE-Q: Uitleg bij de scoring

1) Scores op de individuele items

ter bepaling van de frequentie en ernst van de gedrags -en attitude aspecten van eetstoornissen.

2) Subschaal scores (zie scoreformulier)

deze bieden een profiel in termen van de 4 belangrijkste aspecten van de psychopathologie van eetstoornissen. Om een subschaalscore te krijgen, worden de scores voor de items van deze subschaal opgeteld en de som wordt gedeeld door het aantal items waaruit de subschaal bestaat. Indien niet alle items van een subschaal ingevuld zijn, wordt de som gedeeld door het aantal ingevulde items. In dit geval dient wel meer dan de helft van het aantal items ingevuld te zijn.

3) Globale totaalscore

De totaalscore biedt een maat voor de algemene ernst van de psychopathologie van de eetstoornis. Om een totaalscore te verkrijgen op de EDE-Q, worden de scores op de subschalen opgeteld en dit totaal wordt gedeeld door het aantal subschalen (4). Als er slechts gegevens van bepaalde subschalen beschikbaar zijn, kan er ook een globale score worden bepaald, op voorwaarde dat er ten minste drie subschaal scores beschikbaar zijn. Aanbevolen wordt om de globale totaalscore altijd samen met gedetailleerde EDE-Q gegevens te rapporteren (de individuele subschalen en de voornaamste gedragsaspecten).

Wij beschikken over een Nederlandstalige kinderversie van de EDE-Q (ChEDE-Q). De ChEDE-Q is een zelfrapportage vragenlijst die een onderscheid maakt tussen verschillende vormen van overeten en kan ons waardevolle informatie verschaffen over het eetgedrag van kinderen en jongeren. De ChEDE-Q is dan ook een nuttig instrument voor *zowel onderzoek* alsook voor de *praktijk*. De ChEDE-Q is een vragenlijst die afgenomen kan worden bij kinderen vanaf de leeftijd van 8 jaar tot ongeveer 18 jaar. (Vanaf 18 jaar kan de volwassen versie gebruikt worden).

Gebruik van de ChEDE-Q of EDE-Q voor wetenschappelijk onderzoek

Wanneer het de bedoeling is om de EDE-Q en/of ChEDE-Q te gebruiken voor wetenschappelijk onderzoek en de resultaten daarvan te rapporteren (bv. in wetenschappelijke artikels), dienen jullie contact op te nemen met de oorspronkelijke auteur van het instrument, namelijk Dr. C. Fairburn (Oxford University):

Centre for Research on Eating Disorders at Oxford
(CREDO-1; http://www.psychiatry.ox.ac.uk/research/researchunits/credo)
University Department of Psychiatry
Warneford Hospital
Oxford OX3 7JX
United Kingdom
email: credoenquiries@psych.ox.ac.uk
telephone: + 44 (0)1865 226479
fax: + 44 (0)1865 226244

Wanneer de ChEDE-Q gebruikt wordt voor onderzoek/publicaties, dient tevens gerefereerd te worden naar:

ChEDE-Q: Decaluwé, V., & Braet, C. (1999). *Child Eating Disorder Examination - Questionnaire. Dutch translation and adaptation of the Eating Disorder Examination - Questionnaire, authored by C. Fairburn & S. Beglin.*

Normgegevens: Goossens, L. & Braet, C. (2010). The screening for eating pathology in the pediatric field. *International Journal of Pediatric obesity, 5,*483-490.

Wat meet de ChEDE-Q?

De ChEDE-Q is een handig instrument om de aanwezigheid van pathologisch eetgedrag na te gaan. Deze vragenlijst genereert 4 subschalen:

- zich zorgen maken over eten
- zich zorgen maken over gewicht
- zich zorgen maken over lichaamsvormen
- lijnen

Daarnaast bevraagt deze vragenlijst episodes van overeten (eetbuien) en gewichtscontrolemaatregelen (zoals braken, laxeren, intensief sporten om te vermageren…).

Hoe gebeurt de afname en scoring?

Eerst en vooral dient het kind/de jongere de vragenlijst zelf in te vullen. Wanneer hij of zij een woord niet begrijpt, kan wel extra uitleg gegeven worden.

Bij de ChEDE-Q hoort ook een scoreformulier waarmee je eenvoudig totaalscores en gemiddelde scores voor elk van de vier subschalen kan berekenen. Om de subschaalscores te vergelijken met normscores kunnen we ons beroepen op de **Vlaamse normen.** (zie pdf bijlage). Voor eventuele eetbuien of gewichtscontrolemaatregelen is geen plaats voorzien op het scoreformulier maar belangrijke zaken (zoals de aanwezigheid van eetbuien of gewichtscontrolemaatregelen) kan je er wel nog extra bij noteren. Item 16 verwijst naar de aanwezigheid van episodes van objectief overeten, item 17 verwijst naar episodes van objectieve eetbuien, item 18 verwijst naar episodes van subjectieve eetbuien.

Hoe de resultaten verder interpreteren?

De ChEDE-Q is een screeningsinstrument en laat dus niet toe om diagnoses van eetstoornissen te stellen. Wanneer op basis van de scores zou blijken dat een jongere in vergelijking met leeftijdsgenoten hoger scoort op één of meerdere van de subschalen en/of eetbuien of gewichtscontrolegedrag rapporteert, dan kan via een klinisch interview (met het ChEDE-interview als gouden standaard) nagegaan worden of er sprake is van een eetstoornis. Meer informatie over de diagnostiek van eetstoornissen bij jongeren is te vinden in Goossens, L. & Moens, E. (2017). Eetproblemen bij kinderen en adolescenten (uitgeverij: ACCO).

Indien jullie nog vragen zouden hebben met betrekking tot de ChEDE-Q, aarzel niet om me te contacteren.
Dit kan op het nummer 09/264.64.21 of via mail: Lien.Goossens@UGent.be

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informa
healthcare

ORIGINAL ARTICLE

Screening for eating pathology in the pediatric field

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Abstract

Objective. To develop normative data for the children's version of the eating disorder examination questionnaire (ChEDE-Q) for adolescents of different weight status and sexes, and to investigate the usefulness of the ChEDE-Q in overweight youngsters by making a comparison with the ChEDE. *Methods*. The subjects were 1 291 adolescents from 12 to 18 years old (429 of them were overweight). The ChEDE-Q and data on height and weight were carried out for all youngsters. For the validity study, 235 overweight subjects were invited to participate in a clinical interview (ChEDE). *Results*. Each of the subscales of the ChEDE-Q was significantly correlated with the corresponding subscale of the ChEDE and no significant difference was found between the interview and questionnaire with regard to the overall proportion of youngsters who reported binge eating and excessive exercising and those who did not. *Conclusions*. The results demonstrate the importance of taking into account sex and weight status when interpreting ChEDE-Q test results. Furthermore, a comparison with the ChEDE indicates that the ChEDE-Q may serve as a reliable instrument for the screening of binge eating episodes among overweight youngsters.

Key words: *Eating disorders, adolescents, overweight, questionnaires, assessment*

Introduction

Many studies have reported on the prevalence of eating disorder (ED) symptoms in youngsters (1–3). Unfortunately, there are few youth-specific instruments to diagnose these problems. The Eating Disorder Examination Questionnaire (EDE-Q) (4) is a self-report questionnaire that assesses the presence and frequency of key ED behaviour and attitudes in adults and is derived from the Eating Disorder Examination interview (EDE) (5). Although a clinical interview is considered the best method for assessing the specific pathology of EDs (6), reliable implementation of such interviews is often hampered by practical drawbacks, such as the fact that it requires intensive training, its administration is time-consuming and it is not possible to administer them in a group. The use of a self-report questionnaire like the EDE-Q takes account of these drawbacks and may therefore be a worthy alternative (4), especially in the first stage of the diagnostic process.

The classification of ED pathology in youngsters has to deal with some important developmental considerations (7,8), and so, instruments used in adults should therefore be adapted or re-evaluated for use in younger subjects. Researchers (9) have developed a child-specific version of the EDE-Q (ChEDE-Q). Like the child version of the EDE interview (ChEDE) (10), the ChEDE-Q has been modified to make certain questions more specific and simpler for the youngsters. In addition, some of the items have been reformulated to assess intent rather than actual behaviour. Preliminary research using this ChEDE-Q has demonstrated its reliability and validity for screening for ED pathology in young people (11,12). However, adolescent norms for this ChEDE-Q are not available yet. More recently, other researchers also developed a youth specific EDE-Q and even tried to improve measurement of binge eating by providing a more detailed explanation of ambiguous terms, such as 'large' and 'loss of control' (13). Despite promising results, this instrument remains in need of validation in larger and non-overweight samples as well.

The first aim of the present study was to develop normative ChEDE-Q data for adolescents of different weight status and sexes. Providing norms may

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help both clinicians and researchers to interpret test scores better and identify clinical cases. Some studies already provided norms for adult females (14,15) and adolescent girls (16) using the adult version of the EDE-Q, but the male population has often been neglected. Consistent with previous studies (17), we expect that adolescent girls will experience more ED pathology compared with boys (2,18). Additionally, as research shows that overweight youngsters are also at a higher risk as regards ED pathology (1,19), we hypothesize that separate norms for overweight youngsters will be indicated.

A second aim was to compare the ChEDE-Q and ChEDE among the risk group of overweight youngsters. In the event of satisfactory agreement between both measures, the ChEDE-Q could be recommended as a first-step screening tool for primary health care. Research comparing the EDE and EDE-Q in adults generally found considerable agreement when measuring unambiguous features like self-induced vomiting, but found no consistency when measuring more complex features like binge eating (4,20,21). As one of the modifications of the ChEDE-Q (9) contained the extension of the binge eating items with an explanation of the concept of loss of control over eating (LC), considerable agreement between the ChEDE-Q and ChEDE was expected on these items as well.

Methods

Participants and procedure

The participants were 1 291 adolescents from 12 to 18 years old. Data were collected as part of a PhD project, both in overweight and community based samples. Exclusion criteria were mental retardation and the presence of developmental syndromes. The present study was approved by the local research ethics committee. Informed consent was obtained from the youngsters and their parents.

Community sample. The community sample consisted of 7th to 12th grade high school students. Four schools situated in rural and urban regions participated, and this fact enhances the representative nature of the sample. After having obtained the permission from each school's principal or headmaster, adolescents and their parents received a letter explaining the purpose and method of this study. The informed consent required that the parents indicated if they did not want their child to participate in this study. Fewer than 2% of the parents did not allow their child to participate. In these cases, no further questions were asked with regard to the reasons for not allowing participation. In a next step, informed consent was obtained from all adolescents whose parents gave permission to their child to participate in the study. All of these students agreed to participate. The questionnaires were administered during a class period.

Overweight samples. As only a minority of the youngsters in the community sample were overweight (12.0%, n=118), it was our aim to expand our data on overweight youngsters. To do so, three samples of exclusively overweight youngsters body mass index (BMI >85th percentile for age and sex) were selected.

Overweight *non-treatment seekers* were recruited through advertisements in healthcare magazines and via school mailings. The research was described as a study into the psychological well being of youngsters with 'a bigger size'. These youngsters, all meeting the general inclusion criterion of being overweight, were eligible if, at the time when the study was conducted, they were not looking for or following any kind of inpatient or outpatient treatment (defined as a treatment in order to lose weight with at least the help of a dietician). Another exclusively overweight sample was recruited through an inpatient treatment waiting list (22). All youngsters who were enlisted were considered as *treatment seekers*. A final sample consisted of participants who were at the start of an inpatient treatment programme, the so-called *treatment starters*. This group was questioned during the first week of their treatment.

Table I shows the subject characteristics of the different subsamples of the present study. In general, this procedure provided a sample of 862 non-overweight (NO) and 429 overweight (O) youngsters. Both samples were equally distributed with regard to sex (NO: 45% male, O: 44% male) and age (NO: mean (M)=14.07, standard deviation (SD)=1.04, median (*Mdn*)=14.00, range=12–18; O: M=14.33, SD=1.53; Mdn=14.00; range=12–18) enhancing the comparability of both samples. It needs to be pointed out that the percentage of youngsters who were overweight (33%), was somewhat larger compared with the percentages found in the Flemish population (23).

Measures

Dutch Children's version of the Eating Disorder Examination Questionnaire (ChEDE-Q). The ChEDE-Q (9) is a self-report questionnaire designed for use in youngsters from 8 to 18 years old (see Decaluwé et al. (24) for more information regarding this modification). Concordant with the adult EDE-Q (4), the

Table I. Subject characteristics of the different subsamples of the present study (N=1 291).

		Selected overweight samples		
	Community	Non-treatment seekers	Treatment seekers	Treatment starters
Number of participants (%)	980 (75.9%)	59 (4.6%)	120 (9.3%)	132 (10.2%)
Mean age (*SD*)	14.11 (1.05)	14.66 (1.67)	13.50 (1.31)	15.26 (1.55)
Males/Females	183/353	22/35	45/70	68/64

Note. The different subsamples were composed of an equal male/female ratio, $\chi^2(3)=7.95$, $p>0.05$, with regard to the mean age, the subgroups significantly differed, F (3,1 287)=57.15, $p<0.001$.

ChEDE-Q contains four subscales designed to provide a profile of individuals in terms of four major areas of ED psychopathology: Restraint, Eating Concern, Shape Concern and Weight Concern. The EDE-Q is the only self-report questionnaire that differentiates between the various forms of overeating and provides the determination of binge eating, as defined in DSM-IV-TR (25). It measures objective overeating episodes (OO; the ingestion of an objectively large amount of food without the experience of loss of control over eating), objective bulimic episodes (OBE; the ingestion of an objectively large amount of food together with the experience of loss of control over eating) and subjective bulimic episodes (SBE; the ingestion of an amount of food that is considered large by the subject but not by others, together with the experience of loss of control over eating). Finally, other weight control strategies (for example, fasting or excessive exercising) are assessed. Like the original EDE-Q, the ChEDE-Q has a 28-day time frame for each of the subscales as well as for the diagnostic features. In the present study, Alpha coefficients were 0.81 for Restraint, 0.77 for Eating Concern, 0.86 for Weight Concern and 0.93 for Shape Concern.

Children's version of the Eating Disorder Examination (ChEDE). For the validity study, overweight subjects were invited to participate in a clinical interview (n=235). The Eating Disorder Examination (5) is a standard investigator-based interview measuring the severity of the core psychopathology of EDs and generating ED diagnoses. The ChEDE (10) is based on the adult EDE and is modified by experts in the field of EDs in children in collaboration with the authors of the original EDE. A translation of the ChEDE was designed for use in populations of Dutch youngsters from 8 to 18 years old (26). The ChEDE assesses the same subscales, types of overeating episodes and weight control strategies as the ChEDE-Q. The reliability and validity of the ChEDE is good (24,27). In the present study, Alpha coefficients were 0.57 for Restraint, 0.64 for Eating Concern, 0.65 for Weight Concern and 0.84 for Shape Concern. Of the 235 overweight youngsters who were questioned with the ChEDE, nine (3.8%) fulfilled DSM-IV diagnostic criteria for an eating disorder (one for Bulimia Nervosa, five for Binge Eating Disorder and three for Eating Disorders Not Otherwise Specified).

Physical measurements

In the three exclusively overweight samples, weight and height were measured using calibrated instruments. In the community sample, each participant reported on his or her own height and weight. Data on the validity of self-reported weight and height suggest that adolescents provide information on their weight and height that is as valid as the information provided by adults (18).

The body mass index (BMI; weight/height^2) was determined for each adolescent. In order to make BMI comparisons between adolescents of different ages and sex, the adjusted BMI ([actual BMI/ Percentile 50 of BMI for age and sex] $\times$ 100) was calculated. The 50th percentiles are based on normative data in a Dutch sample (28). An adjusted BMI score $\geq$120% is considered overweight (23). The NO-sample had a mean Adjusted BMI of M=99.44, SD=10.14, Mdn=99.12, range=72.37–119.95. These statistics are comparable with the overall mean Adjusted BMI among the NO population of youngsters (23). The O-sample had a mean Adjusted BMI of M=160.60, SD=29.56, Mdn=157.24, range=120.02–256.04. The O-sample included both overweight (n=144) as well as obese (n=285; Adjusted BMI $\geq$140%) youngsters, but throughout the rest of the manuscript they will be considered one sample.

Statistical analyses

Results are expressed as a mean (standard deviation, SD), percentage or percentile rank of the sample. MANOVA was used to examine differences between non-overweight and overweight youngsters. Sex was included as an independent variable. To inves-

Table II. ChEDE-Q scale scores of the entire sample (N=1 291) and of the overweight and non overweight subsample separately.

	Total sample (n=1 291)	Non-overweight (n=862)	Overweight (n=429)	F - statistic
ChEDE-Q Restraint	0.73 (1.01)	0.47 (0.86)	1.25 (1.08)	203.63***
ChEDE-Q Eating concern	0.73 (0.98)	0.40 (0.71)	1.39 (1.11)	371.93***
ChEDE-Q Weight concern	1.57 (1.53)	0.93 (1.13)	2.88 (1.38)	785.93***
ChEDE-Q Shape concern	1.61 (1.60)	0.96 (1.17)	2.92 (1.55)	694.78***
ChEDE-Q Global score	1.16 (1.15)	0.69 (0.87)	2.11 (1.06)	692.60***

Note. F - statistics indicate results of MANOVA after controlling for gender; ***p <0.001.

tigate the concordance between the ChEDE-Q and ChEDE, Pearson's correlations, Student's paired t-tests (for the subscales) and McNemar test (for key ED and weight control behaviours) were calculated. Data were analysed using SPSS 15.0.

Results

Subject characteristics: Differences between non-overweight and overweight adolescents

Table II represents an overview of the ChEDE-Q scale scores of the total sample (n=1 291) and of the overweight (n=429) and non-overweight (n=862) subsamples separately. A MANOVA revealed an overall significant difference between non-overweight and overweight youngsters, $F(4,1\ 284)$=200.67, p<0.001, on the ChEDE-Q scales. Univariate analyses revealed significant higher scores in the overweight youngsters on each of the subscales (see Table II). Also, a significant main effect of sex, $F(4,1\ 284)$=30.22, p<0.001, was found. Girls showed significantly higher levels of Restraint, $F(1,\ 1\ 287)$=15.67, p<0.001, Eating Concerns, $F(1,1\ 287)$=13.38, p<0.001, Weight Concerns, $F(1,\ 1\ 287)$=99.11, p<0.001, Shape Concerns, $F(1,\ 1\ 287)$=95.25, p<0.001, and a higher Global Score, $F(1,\ 1\ 287)$=71.35, p<0.001, compared with boys. The interaction between sex and group was not significant, $F(4,\ 1\ 284)$=2.04, p>0.05.

ChEDE-Q norms for non-overweight and overweight boys and girls. Based on the results of the MANOVA, it was decided to display ChEDE-Q norms for different subgroups of adolescents, separated by status of overweight and sex. Tables III and IV present an overview of the means (SD) and percentile ranks on the ChEDE-Q Global Scale and on the Restraint, Eating Concern, Weight Concern and

Table III. Descriptives and percentiles for ChEDE-Q scores for *non-overweight* adolescents (12–18 years).

	Non-overweight *girls* (n=468)					Non-overweight *boys* (n=394)				
	Global score	Restraint	Eating concern	Weight concern	Shape concern	Global score	Restraint	Eating concern	Weight concern	Shape concern
Mean	0.92	0.61	0.47	1.27	1.32	0.42	0.30	0.32	0.52	0.53
SD	0.96	0.95	0.75	1.26	1.29	0.65	0.71	0.64	0.79	0.82
Percentile										
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.10	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00
20	0.16	0.00	0.00	0.20	0.25	0.00	0.00	0.00	0.00	0.00
25	0.24	0.00	0.00	0.40	0.38	0.03	0.00	0.00	0.00	0.00
30	0.31	0.00	0.00	0.40	0.50	0.05	0.00	0.00	0.00	0.00
35	0.38	0.00	0.00	0.60	0.63	0.08	0.00	0.00	0.00	0.00
40	0.45	0.00	0.20	0.60	0.75	0.11	0.00	0.00	0.00	0.13
45	0.52	0.20	0.20	0.80	0.76	0.14	0.00	0.00	0.00	0.13
50	0.59	0.20	0.20	1.00	0.88	0.19	0.00	0.00	0.20	0.19
55	0.69	0.40	0.20	1.00	1.00	0.24	0.00	0.20	0.20	0.25
60	0.77	0.40	0.20	1.20	1.13	0.29	0.00	0.20	0.40	0.38
65	0.88	0.40	0.40	1.20	1.38	0.33	0.00	0.20	0.40	0.50
70	1.07	0.60	0.40	1.40	1.63	0.39	0.20	0.20	0.60	0.63
75	1.30	0.80	0.60	1.80	1.88	0.50	0.20	0.40	0.80	0.75
80	1.53	1.00	0.80	2.24	2.38	0.62	0.40	0.40	1.00	0.88
85	1.93	1.40	1.00	2.60	2.63	0.85	0.60	0.60	1.20	1.09
90	2.29	2.00	1.40	3.20	3.38	1.00	0.90	1.00	1.40	1.50
95	3.07	2.80	2.00	4.00	4.13	1.89	1.8	1.45	2.05	2.28
99	4.10	4.46	3.60	5.12	5.50	3.38	3.03	3.21	3.61	4.04

Table IV. Descriptives and percentiles for ChEDE-Q scores for *overweight* adolescents (12–18 years).

	Overweight *girls* (n=237)					Overweight *boys* (n=192)				
	Global score	Restraint	Eating concern	Weight concern	Shape concern	Global score	Restraint	Eating concern	Weight concern	Shape concern
Mean	2.29	1.30	1.48	3.16	3.22	1.88	1.18	1.27	2.53	2.56
SD	0.98	1.02	1.12	1.24	1.41	1.12	1.15	1.08	1.47	1.63
Percentile										
5	0.88	0.00	0.00	1.20	1.13	0.22	0.00	0.00	0.33	0.00
10	1.11	0.20	0.20	1.60	1.25	0.45	0.00	0.00	0.40	0.50
15	1.26	0.40	4.00	1.94	1.63	0.62	0.20	0.20	0.60	0.63
20	1.41	0.40	4.00	2.00	1.75	0.76	0.20	0.20	1.00	0.88
25	1.54	0.60	0.60	2.20	2.00	0.92	0.40	0.40	1.20	1.13
30	1.60	0.60	0.80	2.40	2.25	1.10	0.40	0.40	1.60	1.25
35	1.74	0.80	1.00	2.60	2.50	1.24	0.40	0.60	2.00	1.63
40	1.84	0.80	1.00	2.80	2.75	1.52	0.60	0.80	2.20	2.00
45	2.03	1.00	1.20	3.00	2.88	1.67	0.60	0.97	2.37	2.48
50	2.14	1.00	1.20	3.00	3.13	1.82	0.80	1.00	2.60	2.63
55	2.33	1.20	1.40	3.40	3.38	2.04	0.80	1.20	2.80	2.75
60	2.53	1.40	1.60	3.40	3.75	2.20	1.16	1.20	3.00	3.00
65	2.73	1.40	1.80	3.60	3.88	2.41	1.20	1.60	3.20	3.25
70	2.89	1.60	1.80	4.00	4.13	2.60	1.42	1.80	3.40	3.50
75	2.96	1.80	2.20	4.10	4.25	2.76	1.80	2.00	3.75	3.84
80	3.24	2.00	2.40	4.40	4.63	2.85	2.00	2.20	3.89	4.05
85	3.42	2.40	2.66	4.60	4.88	3.06	2.41	2.60	4.20	4.50
90	3.76	2.80	3.20	4.80	5.13	3.35	3.20	3.00	4.54	4.88
95	4.00	3.42	3.80	5.20	5.51	3.86	3.67	3.27	5.00	5.38
99	4.44	4.32	5.12	5.72	6.00	4.73	4.41	4.20	5.43	5.77

Shape Concern subscales for non-overweight as well as for overweight boys and girls.

Table V displays the percentage (%) of participants, again separated by status of overweight and sex, engaging in key eating disorder and weight control behaviours. Also in this table a distinction was made between the % of youngsters reporting a certain behaviour at least once over the past month, and youngsters reporting a certain behaviour on a more regular (clinical) basis, that is at least four times a month (or once a week).

With regard to the key eating disorder behaviours, descriptives indicate that higher percentages of OO, OBE and SBE can be detected in overweight youngsters compared with normal weight youngsters. Nearly 50% of overweight youngsters (both boys and girls) reported OO at least once over the last month. Moreover, 20% of overweight boys and 25% of overweight girls reported OO at least once a week. Also, nearly 50% of the overweight youngsters (both boys and girls) reported OBE or SBE at least once over the last month. About 20% of them even reported

Table V. Percentages of participants separated by status of overweight and gender, engaging in key eating disorder and weight control behaviours (12–18 years).

	Non-overweight				Overweight			
	Boys (n=394)		Girls (n=468)		Boys (n=192)		Girls (n=237)	
	≥1	≥4	≥1	≥4	≥1	≥4	≥1	≥4
OO	22.6	6.4	23.3	7.6	47.9	20.6	52.7	25.5
OBE	5.1	0.6	8.1	2.0	27.6	10.6	23.6	10.4
SBE	9.4	1.9	11.5	2.9	20.8	9.0	26.6	12.1
Self-induced vomiting	1.0	0.3	2.1	0.8	6.8	2.5	7.2	2.9
Laxative/diuretic misuse	1.0	0.9	0.9	0.6	2.1	1.0	3.8	0.8
Appetite depressant misuse	0.5	0.5	1.1	0.8	2.6	0.0	4.2	1.2
Excessive exercise	9.1	5.9	13.9	8.3	34.4	19.6	23.6	17.2

Note. OO=objective overeating; OBE=objective binge eating; SBE=subjective binge eating; ≥1=percentage of participants reporting a certain behaviour at least once over the past 28 days; ≥4=percentage of participants reporting a certain behaviour at least 4 times (once per week) over the past 28 days.

Table VI. Comparison between the ChEDE-Q and ChEDE subscale scores in overweight adolescents (N=235).

	ChEDE-Q M (*SD*)	ChEDE M (*SD*)	r^2	t
Restraint	1.28 (1.07)	1.12 (1.05)	0.38***	–2.19*
Eating concern	1.46 (1.13)	0.64 (0.81)	0.59***	–13.55***
Weight concern	3.07 (1.34)	2.01 (1.13)	0.46***	–12.38***
Shape concern	3.08 (1.54)	1.98 (1.29)	0.67***	–14.26***

Note. r=Pearson's correlation coefficient; t=paired t-test. SD: Standard deviation.
*p<0.05, ***p<0.001.

one of these episodes once a week. Interestingly, 14.5% of the boys and 19.6% of the girls who are not overweight reported binge eating episodes over the last month with 2.5% of those boys and 4.9% of those girls even once a week.

Comparison between the ChEDE-Q and ChEDE. Table VI presents the subscale scores as measured by both instruments. Results showed that each of the subscales of the ChEDE-Q was significantly correlated with the corresponding subscale of the ChEDE. Results of the paired t-tests demonstrated that the subscale means on the ChEDE-Q were significantly higher compared with the means of the ChEDE.

As presented in Table VII, results of the McNemar test indicated that no significant difference was found between the interview and questionnaire with regard to the overall proportion of youngsters who did and those who did not report SBE, OBE and excessive exercising. On the other behaviours, significant differences were detected between the proportions identified by the interview and those identified by the questionnaire. More specifically, with regard to OO the ChEDE-Q identified more youngsters reporting this behaviour (56.8%) compared with the ChEDE (36.8%). Regarding the other weight control behaviours, the ChEDE-Q identified less youngsters who reported self-induced vomiting, laxative/diuretic misuse and appetite depressant misuse.

Discussion

It was the main purpose of the present study to provide normative data for the children's version of the EDE-Q. The EDE-Q and its adapted versions are widely used instruments in research as well as in clinical practice of EDs and obesity (13,24,29). As several authors have already stressed (14,15), normative data are essential for the interpretation of test scores. In the present study, ChEDE-Q data were obtained from 1 291 adolescents. In line with previous reports in paediatric samples [1,2,19,29], significant differences in the prevalence of eating pathology were found to be dependent on the adolescents' weight status and sex, thereby confirming the need for separate norms for both normal weight and overweight boys and girls.

Additionally, to investigate the convergent validity of the ChEDE-Q, a comparison was made between the ChEDE-Q and ChEDE in the risk group of overweight youngsters. With regard to the subscales, significant correlations were found between the ChEDE-Q and ChEDE. However, in line with previous studies comparing self-report with interview measures among young people (13,24), the ChEDE-Q yielded significantly higher mean subscale scores than the ChEDE.

With regard to the identification of key eating disorder and weight control behaviours both measures detected equal proportions of youngsters engaging in OBE, SBE and excessive exercising. This indicates that for investigating the prevalence of this latter

Table VII. Comparison between the ChEDE-Q and ChEDE regarding the identification of the key eating disorder and weight control behaviours in overweight youngsters (n=235).

	ChEDE-Q % Yes	ChEDE % Yes	McNemar test	% concordant cases	% non-concordant cases
OO	56.8	36.8	***	52.56	47.44
OBE	23.8	23.0	>0.05	68.51	31.49
SBE	23.0	20.0	>0.05	66.38	33.62
Self-induced vomiting	3.8	13.6	***	85.96	14.04
Laxative/diuretic misuse	3.4	14.5	***	84.68	15.32
Appetite depressant misuse	3.0	14.5	***	84.26	15.74
Excessive exercise	30.2	27.2	>0.05	68.94	31.06

Note. OO=objective overeating; OBE=objective binge eating; SBE=subjective binge eating; Significant results on McNemar test indicate significant differences between interview and questionnaire regarding the proportions yes/no cases. ***p<0.001.

behaviour, the ChEDE-Q may be as reliable as the ChEDE. Especially with regard to the assessment of OBE and SBE, this finding is promising as binges are the core characteristics of Binge Eating Disorder and previous studies in adults have often yielded a lack of consistency when measuring these complex features (20,21). Because the ChEDE-Q provides an explanation of the concept of loss of control over eating, youngsters are assisted in gaining a better grasp of the meaning of OBE and SBE, and this may possibly explain the convergence between both measures.

Unfortunately, the two measures were not always particularly convergent. As regards the experience of OO, the ChEDE-Q overestimated the number of youngsters engaging in this behaviour (compared with the interview). A possible explanation for this finding might be that the central criterion of OO, namely eating a large amount of food, is still very ambiguous. In the questionnaire, each youngster has to decide for himself or herself whether or not the amount of food he or she has eaten could be considered large. This decision is very subjective and susceptible to several factors, such as this person's own standards and those of his or her surrounds. In contrast, in the interview, the administrator decides whether or not an amount is to be considered large so that the same standards are applied across all interviews. A possible solution for having a more reliable assessment of these OO episodes may be to include examples and pictures of large portions in the ChEDE-Q, as has already been proposed by other researchers (13).

In addition, with regard to self-induced vomiting, laxative/diuretic misuse and appetite depressant misuse significant differences were found between the ChEDE-Q and ChEDE with the questionnaire consistently identifying less of this behaviour than the interview. A possible explanation may be that it is too confrontational for (overweight) youngsters to report on this discreet behaviour by means of a questionnaire. An interviewer may make these youngsters feel more comfortable and may create a more secure environment in which to report on this behaviour.

The composition of the sample may be considered an important strength of the present study. First of all, we have succeeded in gathering enough data from boys. In addition, to the best of our knowledge this has been the first study to take into account weight status for the development of EDE-Q norms. This procedure resulted in a non-overweight sample that was representative of the overall population of non-overweight youngsters, and an overweight sample that was characterised by a broad range of overweight youngsters. The developmentally appropriate adaptations, the concordance with the ChEDE and the intrinsic similarities with the EDE-Q make the ChEDE-Q an useful screening instrument in adolescents. In addition, the ChEDE-Q may be a valuable tool for longitudinal research and the evaluation of ED or obesity treatments.

The present study has also some limitations. First of all, in order to consider enough cases the ChEDE interview was only administered in overweight samples. Consequently, findings with regard to the comparison between the ChEDE-Q and ChEDE cannot be generalised to the entire population of adolescents. Future research should investigate the correspondence between both measures in community samples of youngsters as well. A second limitation is the use of self-reported data on weight and height in the community sample. Although research has generally confirmed the validity of using self-reported physical measures in adolescents, the possibility still exists that self-reports of these physical measures may be biased. Future research may therefore use objective measures of weight and height in all youngsters instead of self-reports. A third limitation may be the broad age range of the adolescents in the present sample. As longitudinal evidence has already suggested, levels of eating pathology tend to increase through adolescence (30). As our aim was to concentrate on providing norms for youngsters of different sexes and weight status, we opted not to make another segmentation according to age (as this would have made our subsamples too small). Moreover in the present sample, only small correlations were found between age and the ChEDE-Q subscales (data not presented). However, for future research it might be interesting to develop age-specific norms as well. Investigating the appropriate age at which adult questionnaires may provide information that is as reliable as youth versions, will be a challenge for future research. At the moment, we do not know whether for adolescents, the ChEDE-Q is better than administering the adult EDE-Q. Future research should compare adolescents' responses on both instruments and investigate whether they are specific and sensitive enough compared with the ChEDE. Finally, future research may also provide normative data for overweight and obese youngsters separately.

In conclusion, the present study provides normative data for the ChEDE-Q among a large sample of adolescents of different weight status and sex. Furthermore, a comparison with the ChEDE indicates that the ChEDE-Q may serve as a reliable instrument for the screening of binge eating episodes among overweight youngsters.

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Table 1.

Descriptives and percentiles for ChEDE-Q scores for *non-overweight* adolescents (12-18 years)

	Non-overweight *girls* (n = 468)					Non-overweight *boys* (n = 394)				
	Global Score	Restraint	Eating Concern	Weight Concern	Shape Concern	Global Score	Restraint	Eating Concern	Weight Concern	Shape Concern
Mean	.92	.61	.47	1.27	1.32	.42	.30	.32	.52	.53
SD	.96	.95	.75	1.26	1.29	.65	.71	.64	.79	.82
Percentile										
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.10	.00	.00	.00	.13	.00	.00	.00	.00	.00
20	.16	.00	.00	.20	.25	.00	.00	.00	.00	.00
25	.24	.00	.00	.40	.38	.03	.00	.00	.00	.00
30	.31	.00	.00	.40	.50	.05	.00	.00	.00	.00
35	.38	.00	.00	.60	.63	.08	.00	.00	.00	.00
40	.45	.00	.20	.60	.75	.11	.00	.00	.00	.13
45	.52	.20	.20	.80	.76	.14	.00	.00	.00	.13
50	.59	.20	.20	1.00	.88	.19	.00	.00	.20	.19
55	.69	.40	.20	1.00	1.00	.24	.00	.20	.20	.25
60	.77	.40	.20	1.20	1.13	.29	.00	.20	.40	.38
65	.88	.40	.40	1.20	1.38	.33	.00	.20	.40	.50
70	1.07	.60	.40	1.40	1.63	.39	.20	.20	.60	.63
75	1.30	.80	.60	1.80	1.88	.50	.20	.40	.80	.75
80	1.53	1.00	.80	2.24	2.38	.62	.40	.40	1.00	.88
85	1.93	1.40	1.00	2.60	2.63	.85	.60	.60	1.20	1.09
90	2.29	2.00	1.40	3.20	3.38	1.00	.90	1.00	1.40	1.50
95	3.07	2.80	2.00	4.00	4.13	1.89	1.8	1.45	2.05	2.28
99	4.10	4.46	3.60	5.12	5.50	3.38	3.03	3.21	3.61	4.04

Table 2.

Descriptives and percentiles for ChEDE-Q scores for *overweight* adolescents (12-18 years)

	Overweight *girls* (n = 237)					Overweight *boys* (n = 192)				
	Global Score	Restraint	Eating Concern	Weight Concern	Shape Concern	Global Score	Restraint	Eating Concern	Weight Concern	Shape Concern
Mean	2.29	1.30	1.48	3.16	3.22	1.88	1.18	1.27	2.53	2.56
SD	.98	1.02	1.12	1.24	1.41	1.12	1.15	1.08	1.47	1.63
Percentile										
5	.88	.00	.00	1.20	1.13	.22	.00	.00	.33	.00
10	1.11	.20	.20	1.60	1.25	.45	.00	.00	.40	.50
15	1.26	.40	4.00	1.94	1.63	.62	.20	.20	.60	.63
20	1.41	.40	4.00	2.00	1.75	.76	.20	.20	1.00	.88
25	1.54	.60	.60	2.20	2.00	.92	.40	.40	1.20	1.13
30	1.60	.60	.80	2.40	2.25	1.10	.40	.40	1.60	1.25
35	1.74	.80	1.00	2.60	2.50	1.24	.40	.60	2.00	1.63
40	1.84	.80	1.00	2.80	2.75	1.52	.60	.80	2.20	2.00
45	2.03	1.00	1.20	3.00	2.88	1.67	.60	.97	2.37	2.48
50	2.14	1.00	1.20	3.00	3.13	1.82	.80	1.00	2.60	2.63
55	2.33	1.20	1.40	3.40	3.38	2.04	.80	1.20	2.80	2.75
60	2.53	1.40	1.60	3.40	3.75	2.20	1.16	1.20	3.00	3.00
65	2.73	1.40	1.80	3.60	3.88	2.41	1.20	1.60	3.20	3.25
70	2.89	1.60	1.80	4.00	4.13	2.60	1.42	1.80	3.40	3.50
75	2.96	1.80	2.20	4.10	4.25	2.76	1.80	2.00	3.75	3.84
80	3.24	2.00	2.40	4.40	4.63	2.85	2.00	2.20	3.89	4.05
85	3.42	2.40	2.66	4.60	4.88	3.06	2.41	2.60	4.20	4.50
90	3.76	2.80	3.20	4.80	5.13	3.35	3.20	3.00	4.54	4.88
95	4.00	3.42	3.80	5.20	5.51	3.86	3.67	3.27	5.00	5.38
99	4.44	4.32	5.12	5.72	6.00	4.73	4.41	4.20	5.43	5.77

Table 3.

Percentages of participants, separated by status of overweight and gender, engaging in key eating disorder and weight control behaviours (12-18 years)

	Non-overweight				Overweight			
	Boys (*n* = 394)		Girls (*n* = 468)		Boys (*n* = 192)		Girls (*n* = 237)	
	≥ 1	≥ 4	≥ 1	≥ 4	≥ 1	≥ 4	≥ 1	≥ 4
OO	22.6	6.4	23.3	7.6	47.9	20.6	52.7	25.5
OBE	5.1	0.6	8.1	2.0	27.6	10.6	23.6	10.4
SBE	9.4	1.9	11.5	2.9	20.8	9.0	26.6	12.1
Self-induced vomiting	1.0	0.3	2.1	0.8	6.8	2.5	7.2	2.9
Laxative/diuretic misuse	1.0	0.9	0.9	0.6	2.1	1.0	3.8	0.8
Appetite depressant misuse	0.5	0.5	1.1	0.8	2.6	0.0	4.2	1.2
Excessive exercise	9.1	5.9	13.9	8.3	34.4	19.6	23.6	17.2

Note. OO = objective overeating; OBE = objective binge eating; SBE = subjective binge eating; ≥ 1 = percentage of participants reporting a certain behaviour at least once over the past 28 days; ≥ 4 = percentage of participants reporting a certain behaviour at least 4 times (once per week) over the past 28 days