INTRODUCTION
Chocolate is the most frequently craved food having a uniquely attractive taste. Chocolate popularity appears related to its ability to induce sensory pleasure and positive emotions; however, it can also report negative emotions, in particular guilt. Structural equation modelling (SEM) is a technique useful to test causal relationships among personal values, attitudes and behaviours. In the present work the attitude and the emotions related to chocolate consumption for Catalanian consumers were evaluated and related with their interest in eating healthy and their chocolate consumption.

SURVEYS
Data used in this study was a survey carried out in Vic, Spain during 2011. Consumers completed the following questionnaires:

- The Attitudes to Chocolate Questionnaire (1) using a 10 cm line with “very much like me” at one end and “not at all like me” on the other end.
- Part of the Dutch Eating Behaviour Questionnaire (2) adapted to chocolate emotional eating. The response format was: never (1), seldom (2), sometimes (3), often (4) and very often (5).
- The Health Attitudes Questionnaire (3) using a Likert scale with 5-point from “totally disagree” to “totally agree.”
- Chocolate consumption habits, the amount of chocolate eaten per week and the frequency of chocolate cravings.

DATA ANALYSIS
Exploratory factor analysis (PCA with varimax rotation procedure) was used to assess construct validity. SPSS software was used.

Reliability was assessed for each sub-scale or construct. Cronbach’s alpha coefficient values were calculated using SPSS software.

SEM analysis was performed to obtain and validate the model of causal relations among the factors extracted. This analysis was performed with AMOS software.

METHODS

Use of SEM analysis to relate consumer’s attitudes and consumption of chocolate

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INTRODUCTION
The healthiness of food has a little impact on my food choices.
H1 I am very particular about the healthiness of food I eat.
H2 I eat what I like and I do not worry much about the healthiness of food.
H3 I always follow a healthy and balanced diet.
H4 It is important for me that my diet is low in fat.
H5 I do not avoid foods, even if they may raise my cholesterol.

Light-Products Interest
L1 I do not think that light products are healthier than conventional products.
L2 In my opinion, the use of light products does not improve one’s health.
L3 In my opinion light products don’t help to drop cholesterol levels.
L4 I believe that eating light products keeps one’s cholesterol level under control.
L5 I believe that eating light products keeps one’s body in good shape.
L6 In my opinion eating light products one can eat without getting too many calories.

RESULTS
First Principal Component analysis was used to determine the factor structure of the items. Factors obtained were: Interest for healthy diet (8 items), importance of healthy diet (10 items), and chocolate consumption (3 items).

The internal consistency of each factor was estimated with the Cronbach’s coefficient that in all cases was higher than the recommended level (0.7). Table 1 shows the values of the coefficient obtained for each factor considering all the items and only the items resulted in the model.

Table 1. Cronbach’s coefficient values obtained for the studied factors.

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>N of Items</th>
<th>Cronbach’s coefficient</th>
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<tbody>
<tr>
<td>CRAVING</td>
<td>10</td>
<td>0.888</td>
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<tr>
<td>GUILTY</td>
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<td>0.878</td>
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<td>GENERAL HEALTH INTEREST</td>
<td>8</td>
<td>0.850</td>
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<tr>
<td>LIGHT-PRODUCTS INTEREST</td>
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<td>0.799</td>
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<tr>
<td>EMOTIONAL EATING</td>
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<td>0.940</td>
</tr>
<tr>
<td>GUILTY</td>
<td>5</td>
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<tr>
<td>GENERAL HEALTH INTEREST</td>
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<td>0.836</td>
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<tr>
<td>LIGHT-PRODUCTS INTEREST</td>
<td>4</td>
<td>0.799</td>
</tr>
</tbody>
</table>

Figure 1. Items included in the questionnaires completed by participants. Only the factors extracted are shown.

Figure 2. Final Confirmatory Analysis of the model of Chocolate Consumption for Catalanian consumers (n=250)

REFERENCES