

Online Appendix A

Table 3.

Ad	Branded Product	Portrayal
Non-sexual Less Energy Dense 1	Nature Valley Granola Bars	A woman rides her bike through a mountainous trail and then stops to admire the view while eating a granola bar
Non-sexual Less Energy Dense 2	Kashi Grain cereal	The components of the cereal are shown in both raw and processed forms in various locations with different people tasting them
Non-sexual More Energy Dense 1	Little Debbie Snack cakes	A grandfather and son are shown eating different versions of the snack cakes while doing different activities together
Non-sexual More Energy Dense 2	Quaker Oats Cookies	A woman is taking out her garbage while about to eat a cookie in her hand. She stops to talk to her neighbor and her neighbor leans over and takes a giant bite out of the cookie.
Sexual Less Energy Dense 1	Carls' Jr. Grilled Chicken Salad	An attractive woman is eating salad in bed and talking about it in a sultry voice. She is eating dripping bites of salad with her hand as the camera closes in on her lips and cleavage. She takes a bath with the salad to get clean.
Sexual Less Energy Dense 2	Bolthouse Farms Baby carrots	An attractive woman in a tight dress is eating enjoying the taste of baby carrots and saying "Oh, baby." A Barry White voice and music sound-alike is playing in the background.
Sexual More Energy Dense 1	Dove Ice cream bars	An attractive woman is eating an ice cream bar and sucking and licking cream off her fingers while eating it.
Sexual More Energy Dense 2	Zokoko Chocolate	Men and women are touching, kissing and licking chocolate off each other's skin.

Online Appendix B

Psychophysiological Metric Collection Procedures

Heart Rate (HR). Heart rate (HR) was collected as an indicator of attentional resource allocation. It was recorded by using two standard 8mm Ag-AgCL electrodes placed on the right and left forearms. A ground electrode was placed on the non-dominant forearm. Heart rate data were computed by constructing a weighted average of R-spikes in the electrocardiogram waveform present in beats per minute per second. Movement artefact were removed using interpolation methods.

Facial electromyography (EMG). Facial electromyography (EMG) was collected as an indicator of the direction of motivational activation and emotion across exposure to the food ads. EMG was recorded over the left orbicularis oculi (*OO*; smiling) and corrugator supercilii (*CS*; frowning) muscle groups using miniature floating 4mm Ag-AgCl electrodes. Activation in the *OO* muscle group is used as an indicator of appetitive motivational activation and positive emotional response, while activation in the *CS* muscle group is used as an indicator of aversive motivational activation and negative emotional response (Fridlund & Cacioppo, 1986; P. Lang et al., 1993; A. Lang, Potter, & Bolls, 2009; Potter & Bolls, 2012). The signal was amplified and filtered with a high-pass filter set at 90Hz and a low-pass filter set at 1000Hz. The signal was rectified, integrated and sampled at 1000Hz. Data were averaged for each half-second.

Skin Conductivity Level (SCL). Skin conductivity level (SCL) was collected as an indicator of sympathetic arousal or intensity of motivational activation (A. Lang et al., 2009; Potter & Bolls, 2012). It was recorded by placing two standard 8mm Ag/AgCl disposable electrodes on the palm of each participant's non-dominant hand. Tonic skin conductance level was recorded using a Biopac MP150 wireless bio-amplifier that passed 0.5v across the electrodes. Raw data were sampled 1000 times per second.

Online Appendix C

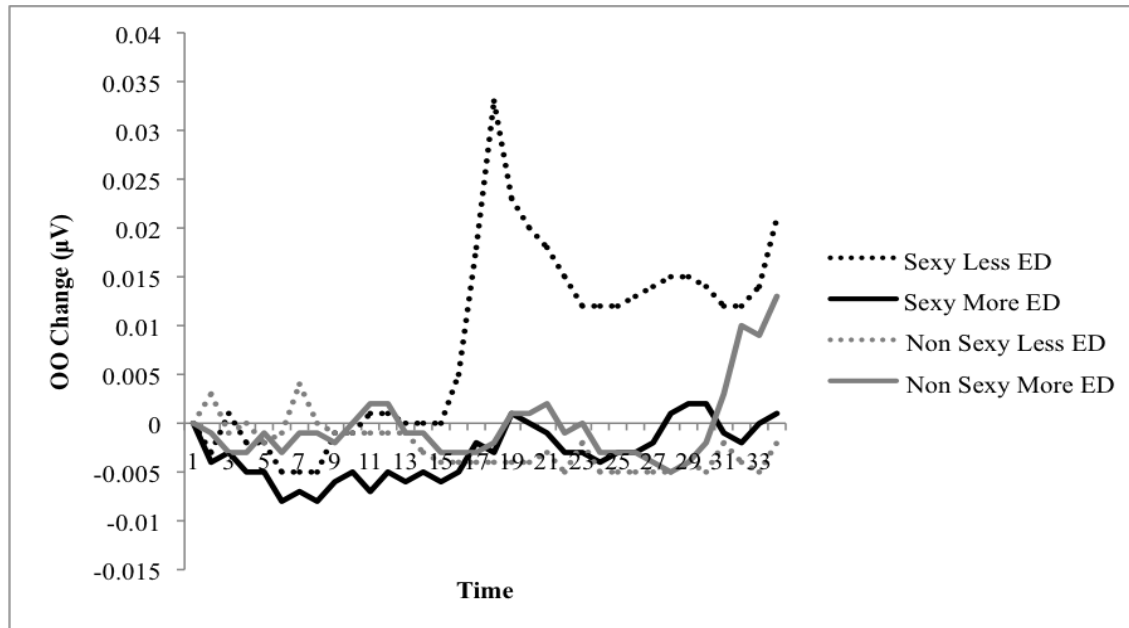


Figure 5. Orbicularis Oculi (OO) muscle activation change over times as a function of sexual appeal and energy density (ED)

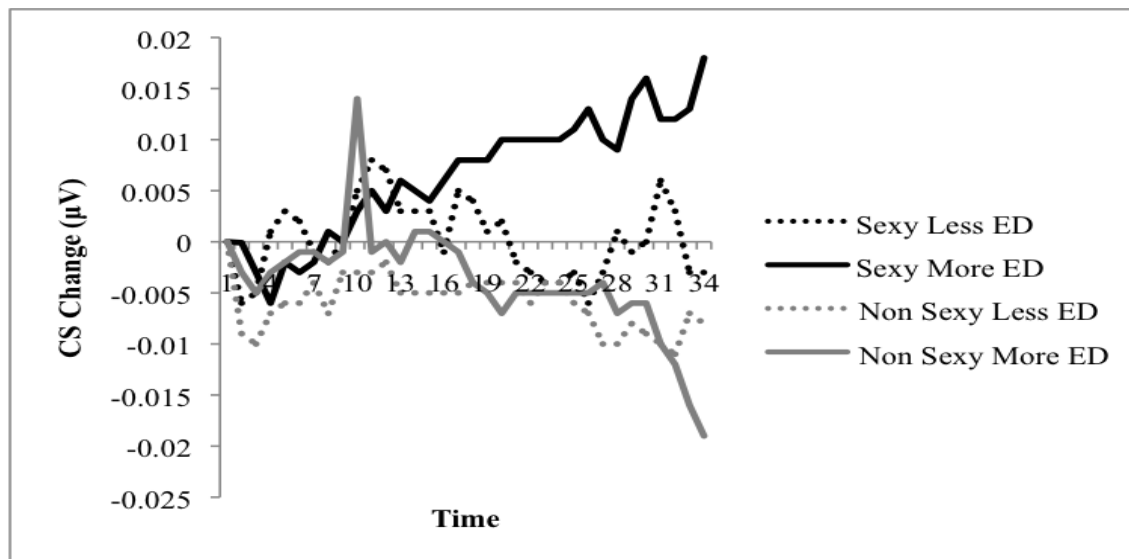


Figure 6. Corrugator Supercilii (CS) muscle activation change over times as a function of sexual appeal and energy density (ED)