The purpose of this study was to determine how children cognitively and emotionally process interactive marketing of snack food products in advergames. Investigating the general relationship between customizing this type of advertising and cognitive and attitudinal effects was central to this purpose. The results of this study indicate that customization of game avatars can affect both subjective feelings of presence and psychophysiological indicators of emotion during gameplay. A secondary analysis of these data revealed significant age differences in responses to avatar customization.