Argument Map: Turnwald et al (2017). Reading between the menue lines

- **MAIN Claim—** The words describing items in healthy menu sections are less appealing than the words describing items in standard menu sections.
  - **Reason—** The words that appear in healthy food section and the standard section of restaurant menus are different.
    - **Evidence—**

Table 1
Results of Healthy Menu Item Versus Standard Item Descriptions

Theme	Odds ratio [95% CI]	Log likelihood	Frequency in healthy menu (% of words)	Frequency in standard menu (% of words)	Exemplar words
Words more likely to occur in standard menu					
Exciting	3.26 [1.73, 6.15]	19.26***	0.17	0.55	Crazy, spellbinding, action, adventure, blasts, kaleidoscope
Fun and engaging	2.04 [1.56, 2.66]	33.11***	1.00	2.03	Fun, dippable, bites, skewered, stacker, tanglers
Traditional	1.96 [1.56, 2.47]	38.85***	1.35	2.61	Countryside, housemade, classic, traditional, famous, recipe
American regional	1.96 [1.31, 2.92]	13.04***	0.44	0.86	Philly, California, Maine, New Orleans, Hawaiian, Nashville
Texture	1.95 [1.50, 2.54]	29.31***	1.02	1.98	Crispy, creamy, crunchy, flaky, gooey, velvety
Provocative	1.89 [.96, 3.73]	4.04*	0.15	0.29	Dangerous, dirty, naked, temptation, sinful, envy
Spicy hot	1.64 [1.12, 2.40]	7.29**	0.49	0.81	Buffalo, mesquite, chipotle, fiery, firecracker, burnin'
Artisan	1.63 [1.07, 2.48]	5.96*	0.41	0.67	Artisan, handcrafted, hand-prepared, premium, finest, refined
Taste	1.52 [1.11, 2.08]	7.71**	0.75	1.13	Sweet, sour, salty, tangy, flavorful, delicious
Indulgent	1.37 [1.14, 1.65]	12.04***	2.21	3.01	Bliss, indulge, richest, succulent, mouth watering, decadent
No difference in healthy menu vs. standard menu					
Size	1.32 [.92, 1.88]	2.46	0.58	0.76	Monster, heaping, biggest, mammoth, huge, giant
Vague positive	1.27 [.77, 2.10]	.93	0.29	0.37	Great, perfect, amazing, best, tremendous, fabulous
Choice	1.13 [.81, 1.57]	.54	0.68	0.77	Choose, options, pick, choices, "you like", substitute
Farm	1.20 [.87, 1.66]	1.15	0.73	0.61	Farm, farmer, field, harvest, vine-ripened, raised
Social	2.72 [.96, 7.72]	3.01	0.09	0.03	Family, everyone, people, mama, daddy, granny
Words more likely to occur in healthy menu					
Foreign	1.27 [1.02, 1.58]	4.26*	1.62	1.28	Asian, Italian, French, Tuscan, Thai, Mexican
Fresh	1.38 [1.09, 1.75]	6.39*	1.41	1.03	Fresh, freshly
Simple	3.27 [1.68, 6.37]	10.25**	0.22	0.07	Simple, dry, mild, plain, mildly, simply
Macronutrients	8.76 [5.57, 13.77]	81.89***	0.75	0.09	Carb, fiber, fat, grain, protein, whole wheat
Thinness	10.72 [7.22, 15.91]	134.28***	1.11	0.10	Light, lighter, enlightened, skinnylicious, lighten, lites
Deprivation	17.70 [8.56, 36.59]	68.68***	0.46	0.03	Fat free, low-fat, sugar-free, no sugar added, low carb, reduced-fat
Nutritious	164.61 [40.04, 676.7]	185.49***	0.85	0.01	Wholesome, nutritional, fit, fit-fare, healthy

Note. Themes are organized by odds ratio from overrepresentation in descriptions of standard menu items (top section) to overrepresentation in descriptions of healthy menu items (bottom section). Themes in the center section showed no significant difference by menu type. For reference, the frequency of "with" (the most common word) was 4.0% in the entire data set. Odds ratios were calculated by dividing the corpus with higher normalized frequency by the corpus with lower normalized frequency such that all odds ratios are >1. CI = confidence interval.
* $p < .05$. ** $p < .01$. *** $p < .001$.

  - **Reason —** Healthy food words are perceived as less appealing than standard food words.
    - **Evidence—** Foods perceived as healthier taste
      - worse (Raghunathan, Naylor, & Hoyer, 2006; Wansink, Park, Sonka, & Morganosky, 2000),
      - are less enjoyable (Raghunathan, Naylor, & Hoyer, 2006; Wansink, Park, Sonka, & Morganosky, 2000),
      - and make people hungrier (Finkelstein & Fishbach, 2010) compared with

the same foods not portrayed as healthy.

- **Evidence—** Perceived healthiness directly represses physiological satietyand metabolism, as indicated by less precipitous postmeal reductions in the hunger hormone, ghrelin (Crum, Corbin, Brownell, &Salovey, 2011).

Definition — Healthy food words: words appearing in the healthy section of the restaurant menu

Definition — Standard food words: words appearing in the standard (not healthy) section of the menu