

Figure S1. Post-Feeding Changes in IP Relative to Baseline Preferences Plotted for Each Rat. Related to Figure 2. A, Same plot as in Figure 2**A** with additional information linking each data point to each rat. Scatter plots show the IP shift from day 1 to day 2 (y-axis, log ratio of IP day 2: day 1) plotted against the IP measured during the baseline session (x-axis) for the control (blocked-fiber) sessions. Data points for each rat are plotted using a unique number and color. **B**, Same as in **A**, but for the inactivation (patent-fiber) sessions.

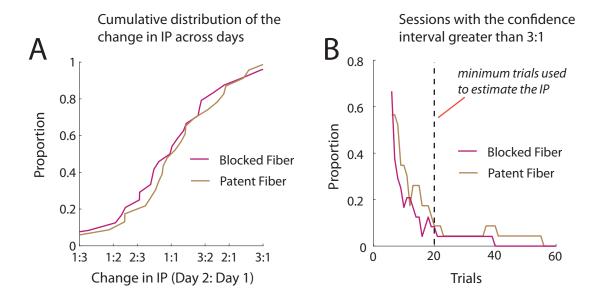


Figure S2. Distributions of the Change in IP Across Days and for the Propotion of Large IP Confidence Intervals as a Function of Trial Number. Related to Figure 2. A, Cumulative distributions of the IP shift from day 1 to day 2 (x-axis, log ratio of IP day 2: day 1) for the blocked- and patent-fiber sessions. B, The proportion (y-axis) of sessions with IP confidence intervals larger than a 3:1 ratio plotted as a function of the trials included in the generalized linear model. This provided an empirical measure of the fewest trials that could be used to establish somewhat reliable estimates of the IP.

Predictor	Beta Coefficient	t ₁₄₈	p-value
y-intercept	-0.22	3.88	1.5e-4
Offers	0.15	2.61	0.010
Preference	-0.41	4.59	9.6e-10
Fiber	0.23	3.49	6.3e-4
Subject	N/A	<= 1.90	>= 0.059
Offers*Preference	0.086	0.93	0.35
Preference*Fiber	0.39	3.20	1.6e-3
Offers*Fiber	0.18	2.40	0.017
Offers*Preference*Fiber	048	0.40	0.69

Table S1. Table of Results for the Linear Regression Performed with the Change in Choice Behavior as the Response Variable. Related to Figure 2.

Predictor	Beta Coefficient	t ₂₀	p-value
y-intercept	-0.28	0.42	0.67
Preference	1.10	1.65	0.11
Fiber	0.22	0.60	0.55
Subject	N/A	<= 2.5	>= 0.01
Preference*Fiber	-1.40	1.50	0.14

Table S2. Table of Results for the Linear Regression Performed with the Inverse Slope as the Response Variable. Related to Figure 3.

Predictor	Beta Coefficient	t ₂₀	p-value
y-intercept	0.25	5.53	2.4e-5
Preference	0.22	0.80	0.43
Fiber	0.072	0.48	0.64
Subject	N/A	<= 3.96	>= 1.0e-4
Preference*Fiber	-0.31	2.07	0.041

Table S3. Table of Results for the Linear Regression Performed with the Choice Latency as the Response Variable. Related to Figure 4.

ANOVA Fiber-Type X Baseline Preference X Offers					
Factor	d.f.	F	p-value		
Fiber	1,43	0.72	0.40		
Preference	1,43	0.01	0.91		
Offers	2,43	2.28	0.11		
Session	43,83	2.64	< 1e-5		
Fiber*Preference	1,43	6.64	0.013		
Fiber*Offers	2,43	1.85	0.16		
Preference*Offers	2,43	0.29	0.75		
Blocked-Fiber: ANOVA Baseline Preference X Offers					
Preference	1,22	4.31	0.05		
Offer	2,22	2.27	0.12		
Session	22,42	2.8	2.0e-3		
Offer*Preference	1,22	1.35	0.27		
Patent-Fiber: ANOVA Baseline Preference X Offers					
Preference	1,21	2.75	0.11		
Offer	2,21	1.76	0.19		
Session	21,39	2.54	5.8e-3		
Offer*Preference	2,21	0.30	0.74		

Table S4. Table of Results for the 3-way repeated measures ANOVA (Fiber-Type X Preference X Offers) and the Corresponding Simple Effects Tests for the Blocked and Patent Levels of the Fiber-Type Factor. Related to Figure 4.