Supplementary Materials A

Extra Models: Naming Accuracy

We conducted a matched model of naming accuracy to the one in the main paper, this time using odor type instead of the experience ratings (Table SM1). As in the other model, we found that attars were significantly more accurate overall compared to both cooks and laypeople, with no significant difference between cooks and laypeople ($B = -0.65$, $SE = 0.37$, $z = -1.76$, $p = 0.08$). As in the main-paper model, we also found that participants were overall more accurate on culinary herbs and spices (culinary odors are more familiar and frequent; see ratings analyses below).

Table SM1

Naming accuracy model matched to the main text model, with odor type instead of experience ratings (N = 704; log-likelihood = -346; compare to Table 1 in the main text). Related predictors in bold were significant in the main-text model.

Predictor	**Estimate**	***SE***	***z***	***p***
(Intercept)	0.34	0.52	0.65	0.52
Group=*Cook*	**-1.84**	**0.55**	**-3.37**	**< .001*** **
Group=*Layperson*	**-2.50**	**0.53**	**-4.73**	**< .001*** **
Type=*Culinary*	**2.88**	**0.42**	**6.80**	**< 0.01** **

We also modeled naming accuracy with respect to gender just in the layperson sample using fixed effects of participant gender (male/female), odor familiarity (numeric), odor frequency (numeric), a familiarity-gender interaction, and a frequency-gender interaction, with random effects of odor and participant in one model (Table SM2a). We then created a matched model using odor type (Table SM2b). Gender did not significantly impact accuracy in either model (all *p*'s > 0.7). As in the main model, culinary/more frequent odors were associated with higher accuracy.

Table SM2a

Naming accuracy model of layperson performance, testing for effects of gender and experience ratings (N = 368; log-likelihood = -165).

Predictor	**Estimate**	***SE***	***z***	***p***
(Intercept)	-5.23	1.28	-4.09	< .001***
Gender=*Male*	-0.52	1.60	-0.32	0.74
Odor familiarity	0.36	0.21	1.74	0.08
Odor frequency	0.47	0.17	2.68	< 0.01**
Gender=*Male** Familiarity	0.47	0.29	1.65	0.10
Gender=*Male** Frequency	-0.34	0.21	-1.62	0.11

Table SM2b

Naming accuracy model of layperson performance, testing for effects of gender and odor type (alternative to the model in Table SM2a; N = 368; log-likelihood = -184).

Predictor	**Estimate**	***SE***	***z***	***p***
(Intercept)	-2.11	0.46	-4.55	< .001***
Gender=*Male*	-0.004	0.53	-0.01	0.99
Type=Culinary	2.48	0.53	4.68	< .001***
Gender=*Male** Type=*Culinary*	0.69	0.57	1.22	0.22

Supplementary Materials B

Extra Models: Likelihood of Response

We conducted a model matched to the one in the main paper for response likelihood, using odor type instead of the experience ratings (Table SM3). As in the main model, we found that participants were overall more likely to respond for culinary herbs and spices (culinary odors are more familiar and frequent). We also found that attars were significantly more likely to respond than both cooks and laypeople, though this difference between attars and cooks was not significant in the main-paper model reported in Table 2. As before, there was no significant difference in responsiveness between cooks and laypeople ($B = -0.45$, $SE = 0.42$, $z = -1.08$, $p = 0.28$).

Table SM3

Response likelihood model with odor type instead of experience ratings (N = 1408; log-likelihood = -689; compare to Table 2 in the main text). Related predictors in bold were significant in the main-text model.

Predictor	**Estimate**	***SE***	***z***	***p***
(Intercept)	1.53	0.50	3.04	<.01**
Group=*Cook*	-1.35	0.59	-2.28	0.02*
Group=*Layperson*	**-1.80**	**0.51**	**-3.52**	**<.001*** **
Type=*Culinary*	**2.15**	**0.31**	**6.95**	**<.001*** **
Task Order	-0.13	0.14	-0.92	0.36

We also modeled response likelihood with respect to gender just in the layperson sample, using fixed effects of participant gender (male/female), odor familiarity (numeric), odor frequency (numeric), and task order, with random effects of odor and participant in one model (Table SM4a). We also created a matched model using odor type (Table SM4b). Gender did not significantly impact accuracy in either model (all *p*'s > 0.5). However, as in the main model, culinary/more frequent and familiar odors were associated with higher accuracy.

Table SM4a

Response likelihood model of layperson performance, testing for effects of gender and experience ratings (N = 736; log-likelihood = -360), shown with females as the reference level for gender.

Predictor	**Estimate**	***SE***	***z***	***p***
(Intercept)	-1.85	0.65	-2.86	< 0.01**
Gender=*Male*	-0.16	0.48	-0.33	0.74
Odor familiarity	0.40	0.08	5.07	<.001***
Odor frequency	0.22	0.07	3.02	< 0.01**
Task Order	-0.33	0.19	-1.67	0.10

Table SM4b

Response likelihood model of layperson performance, testing for effects of gender and odor type (alternative to the model in Table SM4a; N = 736; log-likelihood = -390), shown with females as the reference level for gender and medicinal odors as the reference level for odor type.

Predictor	**Estimate**	***SE***	***z***	***p***
(Intercept)	0.04	0.48	0.08	0.94
Gender=*Male*	-0.26	0.42	-0.61	0.54
Type=*Culinary*	2.34	0.37	6.35	<.001***
Gender=*Male** Type=*Culinary*	-0.28	0.18	-1.57	0.12

Supplementary Materials C

Extra Models: Naming Consistency

We conducted a matched model to the one in the main paper for response consistency, using odor type instead of the experience ratings (Table SM5). In both models, attars were significantly more consistent in their naming than laypeople, with no significant difference between attars and cooks or between cooks and laypeople (B = -1.08, SE = 0.62, z = -1.73, p = 0.08). However, whereas the model in the main text showed a main effect of odor familiarity, this model with odor type did not.

Table SM5

Response consistency model of matched to the main text model, with odor type instead of experience ratings (N = 413; log-likelihood = -125; compare to Table 3 in the main text). Related predictors in bold were significant in the main-text model.

Predictor	**Estimate**	***SE***	***z***	***p***
(Intercept)	3.48	0.96	3.61	<.001**
Group=*Cook*	-1.00	1.00	-0.99	0.32
Group=*Layperson*	**-2.08**	**0.90**	**-2.30**	**0.02***
Type=*Culinary*	**0.71**	**0.45**	**1.58**	**0.11**

We also tested the effect of gender on naming consistency in just the layperson sample, using fixed effects of participant gender (male/female), odor familiarity (numeric), odor frequency (numeric), a familiarity-gender interaction, and a frequency-gender interaction, with random effects of odor and participant in one model (Table SM6a). We then created a matched model using odor type (Table SM6b). Gender did not impact participants' consistency in either model (all p's > 0.3) and we saw no effects of odor frequency, familiarity, or type.

Table SM6a

Response consistency model of layperson performance, testing for effects of gender and experience ratings (N = 185; log-likelihood = -69).

Predictor	**Estimate**	***SE***	***z***	***p***
(Intercept)	-1.00	1.10	-0.91	0.36
Gender=*Male*	-0.32	1.61	-0.20	0.84
Odor familiarity	0.32	0.19	1.72	0.08
Odor frequency	0.10	0.17	0.61	0.54
Gender=*Male** Familiarity	0.34	0.32	1.05	0.29
Gender=*Male** Frequency	-0.22	0.27	-0.79	0.43

Table SM6b

Response consistency model of layperson performance, checking for effects of gender and odor type (alternative to the model in Table SM6a; N = 185; log-likelihood = -74).

Predictor	**Estimate**	***SE***	***z***	***p***
(Intercept)	0.89	0.45	1.98	0.05*
Gender=*Male*	0.67	0.71	0.94	0.34
Type=Culinary	0.94	0.59	1.60	0.11
Gender=*Male** Type=*Culinary*	-0.31	0.89	-0.34	0.73

Supplementary Materials D

Full Model Outcomes: Odor Ratings

Table SM7 shows the model outcomes for each of the six odor rating models. We created the models to have identical fixed effects structure so that findings could be directly compared: fixed effects of participant group (attar/cook/layperson), odor type (medicinal/culinary), their interaction, and participant age (centered numeric), plus random effects of participant and odor, with random slopes of participant group for odor (unless the model would not converge with these added random slopes).

Table SM7

Odor ratings models for each of the six ratings (pleasantness, edibility, medicinalness, intensity, familiarity, and frequency; all N = 704). Significant effects are shaded in gray.

	Pleasantness (log-likelihood = -2829)		
Predictor	**Estimate**	**SE**	**t**
(Intercept)	34.13	3.55	9.61
Group=*Cook*	-9.59	3.87	-2.48
Group=*Layperson*	-14.23	3.31	-4.30
Type=*Culinary*	1.45	4.34	0.33
Age (centered)	0.05	0.08	0.70
Group=*Cook* * Type=*Culinary*	7.61	3.93	1.94
Group=*Layperson* * Type=*Culinary*	10.60	3.57	2.97
	Edibility (log-likelihood = -2916.30)		
Predictor	**Estimate**	**SE**	**t**
(Intercept)	27.55	2.92	9.43
Group=*Cook*	-4.14	3.87	-1.07
Group=*Layperson*	-10.03	3.16	-3.17
Type=*Culinary*	13.04	2.91	4.48
Age (centered)	-0.02	0.09	-0.21
Group=*Cook* * Type=*Culinary*	-0.53	3.19	-0.16
Group=*Layperson* * Type=*Culinary*	0.96	2.77	0.35
	Medicinalness (log-likelihood = -2872)		
Predictor	**Estimate**	**SE**	**t**
(Intercept)	35.84	3.63	9.87
Group=*Cook*	-8.38	4.64	-1.81
Group=*Layperson*	-5.68	3.92	-1.45
Type=*Culinary*	-10.97	3.75	-2.93
Age (centered)	0.07	0.10	0.67
Group=*Cook* * Type=*Culinary*	9.74	3.92	2.48
Group=*Layperson* * Type=*Culinary*	9.15	3.63	2.52

	Intensity (log-likelihood = -2766)		
Predictor	**Estimate**	**SE**	**t**
(Intercept)	36.98	3.60	10.26
Group=*Cook*	-3.55	4.08	-0.87
Group=*Layperson*	-6.19	3.91	-1.58
Type=*Culinary*	-0.81	4.46	-0.18
Age (centered)	-0.18	0.07	-2.43
Group=*Cook* * Type=*Culinary*	8.64	4.40	1.96
Group=*Layperson* * Type=*Culinary*	6.67	4.67	1.43

	Familiarity (log-likelihood = -2844)		
Predictor	**Estimate**	**SE**	**t**
(Intercept)	39.34	2.44	16.12
Group=*Cook*	-7.21	3.94	-1.83
Group=*Layperson*	-13.03	3.78	-3.45
Type=*Culinary*	0.65	2.24	0.29
Age (centered)	-0.03	0.08	-0.37
Group=*Cook* * Type=*Culinary*	9.70	3.92	2.48
Group=*Layperson* * Type=*Culinary*	12.20	4.33	2.82

	Frequency (log-likelihood = -2899)		
Predictor	**Estimate**	**SE**	**t**
(Intercept)	30.75	3.29	9.34
Group=*Cook*	-13.36	3.92	-3.40
Group=*Layperson*	-17.86	3.60	-4.96
Type=*Culinary*	6.64	3.94	1.68
Age (centered)	-0.12	0.08	-1.48
Group=*Cook* * Type=*Culinary*	9.46	4.08	2.32
Group=*Layperson* * Type=*Culinary*	9.70	4.14	2.34

Supplementary Materials E

Extra models: Odor Meta-awareness Ratings

The ten questions on the odor meta-awareness questionnaire were adapted from Smeets and colleagues (2008) and are listed in Table SM8. Figure SM1 shows the pattern of responses across participant groups for each individual question.

Table SM8

Questions on the short order awareness survey. Each response was given on a scale of 1 (never/not at all) to 5 (always/very much).

1. Do you sniff at new books?
2. Do you feel cheerful or happy when you pick up a pleasant odor in the air?
3. Do you notice when people are wearing perfume or aftershave or deodorant?
4. Do odors evoke strong or vivid memories in you?
5. How important are odors to you in your everyday life?
6. When you visit someone else's house do you notice how it smells?
7. Are you the first one to smell gas?
8. Are you the first one to smell a fire, even when the smell only comes from a barbecue or fireplace?
9. Are you the first one to smell spoilt food in the fridge?
10. People differ in their sensitivity to odors. An unpleasant smell can leave one person unaffected yet be unbearable to another. How sensitive to odors do you think you are?

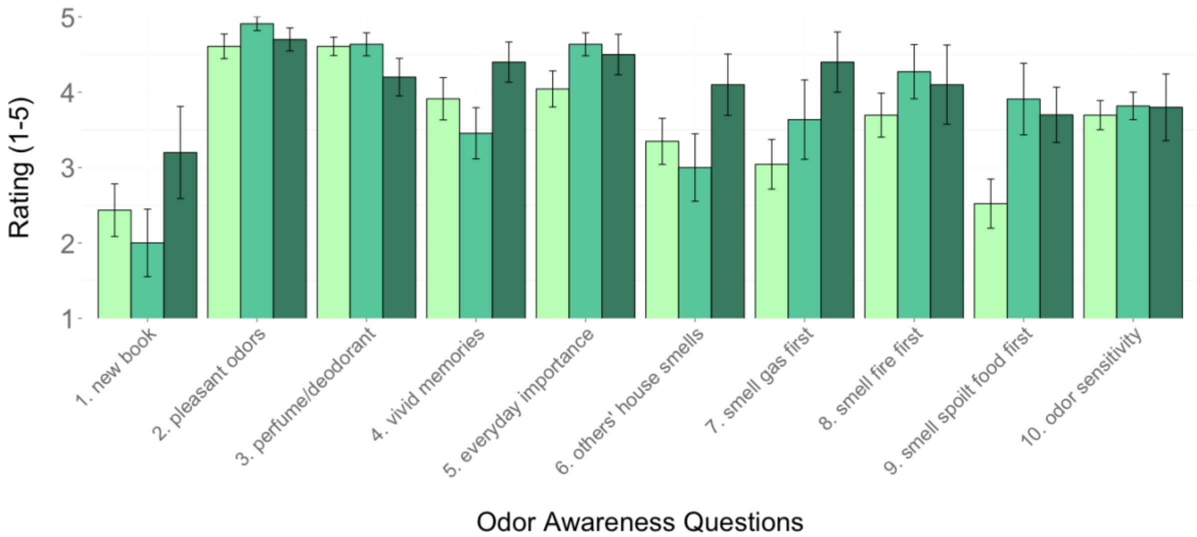

Figure SM1. Ratings by group for each question on the order awareness survey (laypeople = light green; cooks = medium green; attars = dark green). Error bars indicate standard error of the mean.

To test for possible effects of gender and age we created a model of participants' responses with the layperson group only, including fixed effects of gender (male/female), age (centered numeric), and their interaction, plus random effects of participant and survey question (1–10). The model showed no effects of gender, age, or their interaction (all |*t*|'s < 0.5; Table SM9).

Table SM9

Odor meta-awareness response model of the laypeople group, checking for effects of gender and age (N = 230; log-likelihood = -399).

Predictor	**Estimate**	***SE***	***t***
(Intercept)	3.72	0.66	5.61
Gender=*Male*	-0.07	0.65	-0.11
Age (centered)	0.02	0.05	0.34
Gender=*Male* * Age	-0.02	0.05	-0.41