

## Supplementary Material

### **Circulating trimethylamine *N*-oxide levels following fish or seafood consumption**

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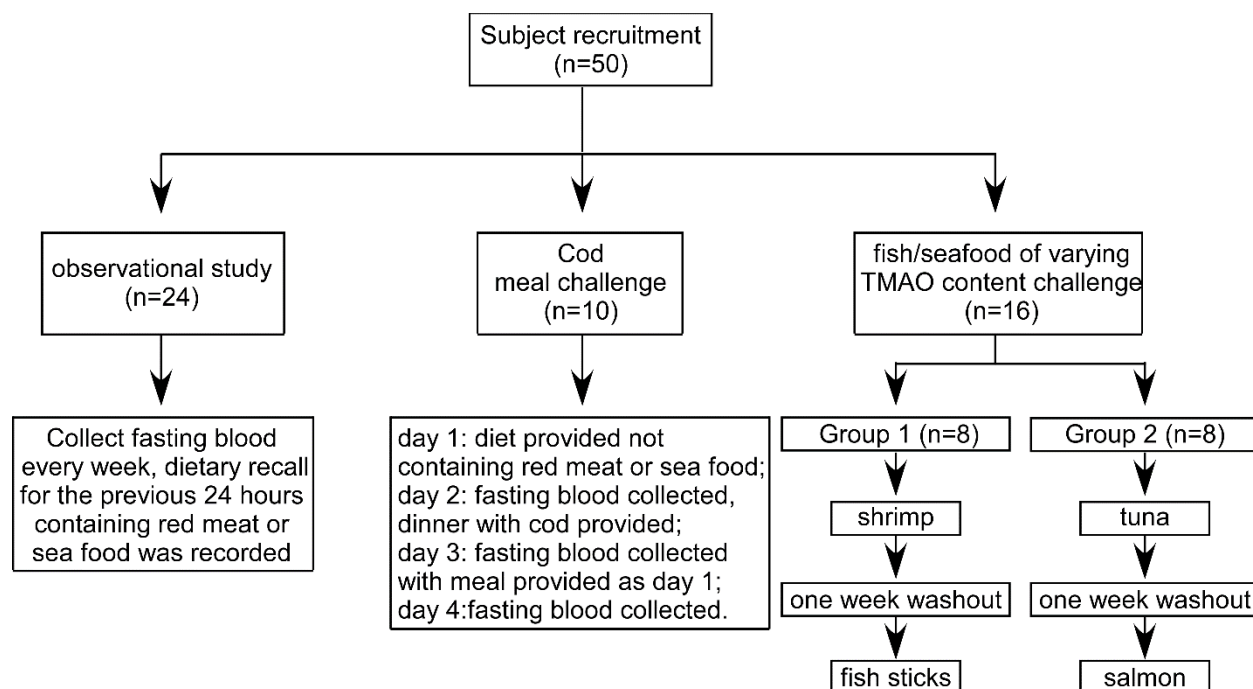
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**Supplementary Table 1. Subject characteristics**

		Study 1	Study 2	Study 3	
				Group 1	Group 2
n		24	10	8	8
Sex, male%		45.8	50	25	87.5
Age		42.7±6.3	41.4±7.8	46.7±6.3	50.4±3.7
Race	African American, %	16.7	22.2	25	0
	Asian, %	4.3	11.1	25	0
	Caucasian, %	82.6	66.7	50	100
BMI		29.0±6.6	28.7±4.9	27.9±4.7	27.1±3.9
CAD, %		0	0	0	0
CVD, %		0	0	0	0
PAD, %		0	0	0	0
DM, %		0	0	0	0
CKD, %		0	0	0	0

Three prospective observational studies were performed. **Study 1**, 24 participants, all omnivores, consented to weekly fasting blood draws once per week for five consecutive weeks. They provided dietary recall for the 24-hour period preceding each blood draw. **Study 2**, 10 participants were enrolled for a four-day dietary challenge study. They were provided with a low TMAO diet on the first and third days, and a TMAO diet (cod) on the second day. Fasting blood was collected the morning following each day of prescribed meals. **Study 3**, All participants (n=16) were advised to abstain from eating fish or red meat the evening prior to baseline blood draw. Participants were then divided into two groups. Group 1 ate a meal containing shrimp, underwent a one-week washout period, and then received a meal containing fish sticks. The second group followed the same pattern, but ate tuna for the first meal and salmon for the second. Fasting blood samples were collected the morning following each prescribed meal. Age and BMI are expressed as mean±SD from the indicated number of participants. CAD, coronary artery disease; CVD, cardiovascular disease; PAD, peripheral artery disease; DM, diabetes mellitus; CKD, chronic kidney disease.



**Supplemental Figure 1. Study schematic.** An overview of the three studies performed. In Study 1, participants (n=24) provided weekly fasting blood samples and full dietary recall for the 24-hours prior to each draw. In Study 2, participants (n=10) ate prescribed diets of high and low TMAO content and provided fasting blood samples after each meal. Finally, participants in Study 3 (n=16) ate two of four different types of seafood, separated by a one week washout period, and provided fasting blood samples after each meal.