



	Thick (cm)	Illuminance
Light off	0 (baseline)	1.3 mW
	0	115 mW
Light on	0.5	9.1 mW
	1	1.95 mW

**Supplement Fig. 4.** Red-light permeability test using pork-shoulder meat. Schematic image of red-light permeability experiment using pork-shoulder meat. Light source and optical power meter were set and 630–690 nm light (115 mW) was irradiated toward optical power meter. Table represents red-light illuminance when red-light was turned off (baseline), when red-light was turned on without meat (0 cm), and when the meats, whose thickness were varied from 0.5 cm to 1.0 cm, were set between light source and optical power meter.