

Table S1. Changes in skin barrier function after cold and hot water exposure

	Basal	Cold water	Hot water	p^{B-C}	p^{B-H}	p^{C-H}
Temperature (°C)	30.18 (1.84 SD)	23.49 (2.59 SD)	32.60 (1.21 SD)	<0.001	<0.001	<0.001
pH	6.33 (0.37 SD)	6.62 (0.30 SD)	6.65 (0.29 SD)	<0.001	<0.001	0.369
Erythema (AU)	249.45 (57.25 SD)	253.63 (56.78 SD)	286.34 (55.88 SD)	0.603	<0.001	<0.001
TEWL (g·h⁻¹·m⁻²)	25.75 (12.40 SD)	34.96 (8.54 SD)	58.58 (10.25 SD)	<0.001	<0.001	<0.001
SCH (AU)	46.69 (18.73 SD)	50.55 (14.90 SD)	44.50 (13.91 SD)	0.040	0.324	0.004

AU, arbitrary units; SCH, stratum corneum hydration; TEWL, transepidermal water loss.

Data are expressed as means (standard deviations, SD).

^{B-C} *p*-value after using Student's *t*-test for paired samples to compare skin barrier function between baseline and after cold water exposure.

^{B-H} *p*-value after using Student's *t*-test for paired samples to compare skin barrier function between baseline and after hot water exposure.

^{C-H} *p*-value after using Student's *t*-test for paired samples to compare skin barrier function after cold and hot water exposure.

Table S2. Changes in skin barrier function after TempTest

	Basal	4°C TempTest	44°C TempTest	p^{B-C}	p^{B-H}	p^{C-H}
Temperature (°C)	30.76 (1.24 SD)	25.35 (2.18SD)	32.45 (1.45 SD)	<0.001	<0.001	<0.001
pH	6.27 (0.37 SD)	6.28 (0.36 SD)	6.25 (0.36 SD)	0.435	0.419	0.132
Erythema (AU)	210.45 (60.85 SD)	209.07 (64.50 SD)	227.79 (60.20 SD)	0.847	0.001	0.017
TEWL (g·h⁻¹·m⁻²)	7.99 (3.39 SD)	8.74 (3.58 SD)	9.98 (3.86 SD)	0.145	<0.001	0.003
SCH (AU)	37.77 (12.94 SD)	39.51 (11.60 SD)	38.01 (11.95 SD)	0.077	0.847	0.121

AU, arbitrary units; SCH, stratum corneum hydration; TEWL, transepidermal water loss.

Data are expressed as means (standard deviations, SD).

^{B-C} *p*-value after using Student's *t*-test for paired samples to compare skin barrier function between baseline and after 4°C TempTest exposure.

^{B-H} *p*-value after using Student's *t*-test for paired samples to compare skin barrier function between baseline and after 44°C TempTest exposure.

^{C-H} *p*-value after using Student's *t*-test for paired samples to compare skin barrier function after 4°C and 44°C TempTest exposure.