## **Effect** of the diet type and temperature on the *C. elegans* transcriptome

**SUPPLEMENTARY MATERIALS** 

Sequence	Uniprobe ID	Name	P-value
<u>A</u>	UP00382 1	MDL-1	5.30e-4
<u> </u>	UP00361 1	HLH-15	1.46e-3

Supplementary Figure 1: Analysis of Motif Enrichment (AME) of the promoter regions of the 71 exclusively hot genes independently of the tested diet shows enrichment on motifs recognized by MDL-1 and HLH-15 transcription factors. Sequence indicates the motif identified in the promoter of the 71 "exclusively hot" genes. Uniprobe ID and name identify the transcription factor that recognize and bind these sequences. *P*-value indicates the statistical enrichment of this motif.

**Supplementary Table 1: List of exclusively hot genes in** *E. coli fed worms.* Show genes that are significantly upregulated at 25°C compared to both 15°C and 20°C, with no statistical difference between 15°C and 20°C, in worms feeding *E. coli*. See Supplementary Table 1

**Supplementary Table 2: List of false hot genes in** *E. coli fed worms* **(downregulated at 15°C)**. Show genes that are significantly downregulated at 15°C compared to both 20°C and 25°C, with no statistical difference between 20°C and 25°C, in worms feeding *E. coli*. See Supplementary\_Table\_2

**Supplementary Table 3: List of exclusively hot genes in** *B. subtilis fed worms.* Show genes that are significantly upregulated at 25°C compared to both 15°C and 20°C, with no statistical difference between 15°C and 20°C, in worms feeding *B. subtilis*. See Supplementary Table 3

Supplementary Table 4: List of false hot genes in *B. subtilis fed worms* (downregulated at 15°C). Show genes that are significantly downregulated at 15°C compared to both 20°C and 25°C, with no statistical difference between 20°C and 25°C, in worms feeding *B. subtilis*. Supplementary Table 5 List of common exclusively hot genes in *E. coli* and *B. subtilis*. Show common genes that are significantly upregulated at 25°C compared to both 15°C and 20°C, with no statistical difference between 15°C and 20°C, in worms feeding either *E. coli* or *B. subtilis*. See Supplementary\_Table\_4

**Supplementary Table 5: List of common exclusively hot genes in** *E. coli* **and** *B. subtilis fed worms.* Show common genes that are significantly upregulated at 25°C compared to both 15°C and 20°C, with no statistical difference between 15°C and 20°C, in worms feeding either E. coli or B. subtilis. See Supplementary Table 5

**Supplementary Table 6: List of exclusively cold genes in** *E. coli fed worms.* Show genes that are significantly upregulated at 15°C compared to both 20°C and 25°C, with no statistical difference between 20°C and 25°C, in worms feeding *E. coli*. See Supplementary Table 6

**Supplementary Table 7: List of false cold genes in** *E. coli fed worms* (downregulated at 25°C). Show genes that are significantly downregulated at 25°C compared to both 15°C and 20°C, with no statistical difference between 15°C and 20°C, in worms feeding *E. coli*. See Supplementary\_Table\_7

**Supplementary Table 8: List of exclusively cold genes in** *B. subtilis fed worms.* Show genes that are significantly upregulated at 15°C compared to both 20°C and 25°C, with no statistical difference between 20°C and 25°C, in worms feeding *B. subtilis*. See Supplementary\_Table\_8

Supplementary Table 9: List of false cold genes in *B. subtilis fed worms* (downregulated at 25°C). Show genes that are significantly downregulated at 25°C compared to both 15°C and 20°C, with no statistical difference between 15°C and 20°C, in worms feeding *B. subtilis*. See Supplementary\_Table\_9

**Supplementary Table 10:** List of common false cold genes in *E. coli* and *B. subtilis fed worms*. Show common genes that are significantly downregulated at 25°C compared to both 15°C and 20°C, with no statistical difference between 15°C and 20°C, in worms feeding either *E. coli* or *B. subtilis*. See Supplementary\_Table\_10

**Supplementary Table 11: List of common false hot genes in** *E. coli* and *B. subtilis fed worms*. Show common genes that are significantly downregulated at 15°C compared to both 20°C and 25°C, with no statistical difference between 20°C and 25°C, in worms feeding either *E. coli* or *B. subtilis*. See Supplementary Table 11

**Supplementary Table 12: List of genes upregulated on an** *E. coli* **diet independently of the temperature.** Show genes that have a significantly higher expression in worms feeding *E. coli* than in worms feeding *B. subtilis*, independently of the tested temperature (15, 20 or 25°C). See Supplementary\_Table 12

**Supplementary Table 13: List of genes upregulated on a** *B. subtilis* diet independently of the temperature. Show genes that have a significantly higher expression in worms feeding *B. subtilis* than in worms feeding *E. coli*, independently of the tested temperature (15, 20 or 25°C). See Supplementary\_Table\_13