

Figure S1. Behavior at Individual Timepoints in the Quadrant Assay, Related to Figure 1.

(A, B) QCIs for WT hermaphrodites (A) and males (B) in response to $1.0 \mu\text{M}$ *ascr#3* with T1 food. QCI values from a given assay are connected across timepoints by a line. The violin plot at the right shows average QCI values (the mean of the four timepoints for each assay). These data are taken from Figure 1D.

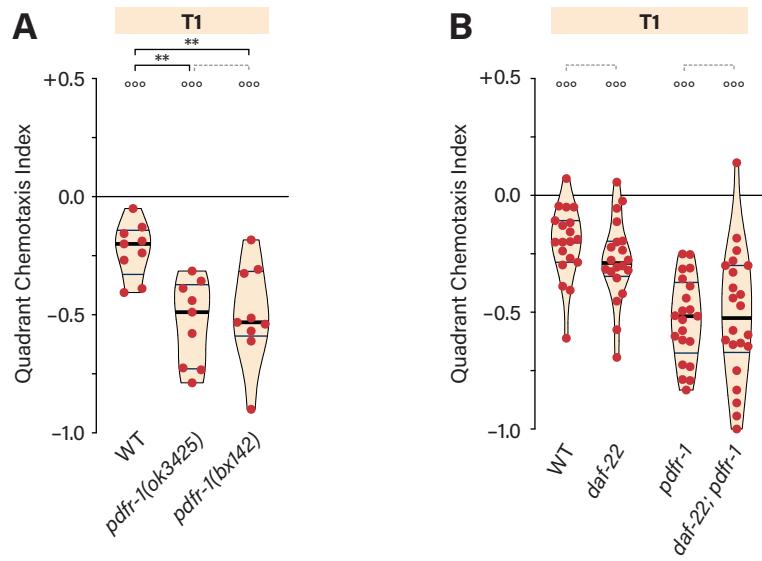


Figure S2. Behavior of *pdfr-1(ok3425)* and *daf-22* Mutants, Related to Figure 2.

(A) QCIs for WT, *pdfr-1(ok3425)*, and *pdfr-1(bx142)* hermaphrodites with T1 food. **(B)** QCIs for WT, *daf-22*, *pdfr-1*, and *daf-22; pdfr-1* hermaphrodites with T1 food. See legend to Figure 1 for details on statistical analyses.

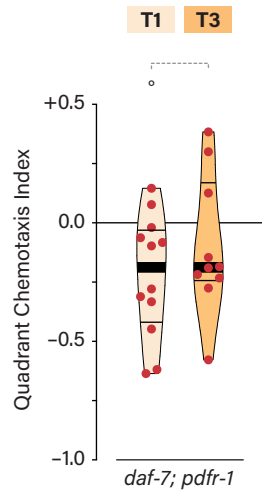


Figure S3. Behavior of *daf-7; pdf-1* Mutants, Related to Figure 3.

QCIs for *daf-7; pdf-1* hermaphrodites with T1 and T3 food. See legend to Figure 1 for details on statistical analyses.

OLIGONUCLEOTIDE SEQUENCE (5'-3')	SOURCE	IDENTIFIER
GTGATCCTCGTCGAAGTTCG	IDT	pdfr-1-genotyping-F1
AACGTTACCGTATCCAGCAATG	IDT	pdfr-1-genotyping-F2
TTCCGAAATCTGCTGCACTTAC	IDT	pdfr-1-genotyping-R
GACCTTCGCAGTGA CT CGA	IDT	pdf-1-genotyping-F1
CTCAGGAATAGGAGTGCTCC	IDT	pdf-1-genotyping-F2
TCAAGGTCTCGCCTCTAGGA	IDT	pdf-1-genotyping-R
CCGCAGTAGCACATCTCTCA	IDT	pdf-2-genotyping-F1
CAGATGCGTTACGGCAACTC	IDT	pdf-2-genotyping-F2
GTTTCGGTGT CACAGGTGAC	IDT	pdf-2-genotyping-R
CATCCGTGTT CGCTGAGAA	IDT	daf-22-genotyping-F
TGGACTGTGCAGCTCCAG	IDT	daf-22-genotyping-R
CAATGGACCCAGAAATGAAGTC	IDT	daf-7-genotyping-F
GTTGAATGCTGATACGTTCCGA	IDT	daf-7-genotyping-R
GGGGACAAC TTTGTATAGAAAAGTTGATCTTCAGATGGGAGCAGTGGACTG	IDT	rab-3p-F
GGGGACTGCTTTTTGTACAAACTTGCTACAGTAGCCCTATTTTCAGATG	IDT	rab-3p-R
GGGGACAAC TTTGTATAGAAAAGTTGCCGACAAAACATGAGTATTTCTTT	IDT	myo-3p-F
GGGGACTGCTTTTTGTACAAACTTGCCACGACCACTAGATCCATCTAGA	IDT	myo-3p-R
GGGGACAAC TTTGTATAGAAAAGTTGTTCTGAAAGTATAAGATTTGACTGA	IDT	nmr-1p-F
GGGGACTGCTTTTTGTACAAACTTGCGACAAACTTTAGTTTTGTTACAGA	IDT	nmr-1p-R
GGGGACAAC TTTGTATAGAAAAGTTGTACAATTGTAGTGAGCTTCGAATTT	IDT	gcy-28.d-F
GGGGACTGCTTTTTGTACAAACTTGAATGGAATGGTGAGATGAGTGCGAA	IDT	gcy-28.d-R
GGGGACAAC TTTGTATAGAAAAGTTGTCCTTAACTTTCTGCTAAAAGTG	IDT	mod-1p-F
GGGGACTGCTTTTTGTACAAACTTGGTGCCAATGCGGTGAAAGAAAATT	IDT	mod-1p-R
GGGGACAAC TTTGTATAGAAAAGTTGCGGAAATTCAGGTAACCAAAGAAC	IDT	tdc-1p-F
GGGGACTGCTTTTTGTACAAACTTGTT CAGGACCGCCAAATGGTTTACG	IDT	tdc-1p-R
GGGGACAAC TTTGTATAGAAAAGTTGTCGGAAATGCGGAAGTTCTTTCCGA	IDT	glr-3p-F
GGGGACTGCTTTTTGTACAAACTTGAATCTTCAATATTTGCTATTAACAT	IDT	glr-3p-R
GGGGACAAC TTTGTATAGAAAAGTTGAATGGAAGACGAGAGACAGTTGG	IDT	osm-6p-F
GGGGACTGCTTTTTGTACAAACTTGCTATTACCTTCATTAGTATACATCT	IDT	osm-6p-R

Table S1. Oligonucleotide Primers Used in This Work, Related to STAR Methods.