Supplementary Figure 1: GO term analysis of DR-regulated proteins.

Gene ontology (GO) analysis of the 183 significant protein with a 3-fold expression change during DR using GoSlimMapper. A) Cellular compartment analysis shows over-representation of mitochondrial proteins being upregulated, while membrane and plasma membrane proteins are downregulated during DR. B) Cellular function analysis shows over-representation of transporter and oxidoreductase enzymes proteins being upregulated, while opposing transporters proteins are downregulated during DR. C) Cellular processes analysis shows over-representation of transporters, metabolic, respiration and mitochondria processes being upregulated, while stress, chromatin organisation, translation and also transporter processes downregulated during DR.
Supplementary Figure 2: Switching from dietary restriction to standard 2% glucose conditions triggers a rapid decline in Hsp26 levels.

BY4741 wild type cells were grown to mid-log phase in YPD media containing 0.05% glucose (time = 0) before switching to 2% glucose for 3 hours or 5 hours. **A)** Representative western blot showing total protein stain (Ponceau S), and immunoblotting using anti-alpha tubulin and anti-Hsp26 antibodies. **B)** densitometric quantification of Hsp26 levels normalised to total protein. Data shown are mean plus SEM (n=3 biological repeat experiments).
Supplementary Figure 3: Replicative lifespan analysis of wild type and hsp26Δ cells under standard and dietary restriction conditions.

Lifespan analysis was performed on BY4741 wild type (A) and hsp26Δ (B) cells grown on YPD media containing 2% or 0.05% glucose. Data shown are pooled from at least 3 independent biological repeat experiments (WT 2%, n=157 cells (4 experiments); WT 0.05%, n=137 cells (5 experiments); HSP26Δ 2%, n=67 cells (3 experiments); HSP26Δ 0.05%, n=84 (4 experiments)). DR resulted in a significant lifespan extension in both wild type and mutant strains (P< 0.01). There was no significant difference in lifespan between wild type and HSP26Δ strains in either condition.