

Table S1. Weight values (mean \pm s.e.) for the groups before and after treatment.

	Weight (g)
Control group	
Day 0	0.3070 \pm 0.03297
Day 21	0.3184 \pm 0.03290
Maltodextrin group	
Day 0	0.2593 \pm 0.02577
Day 21	0.2872 \pm 0.02705
Probiotic group	
Day 0	0.3249 \pm 0.04026
Day 21	0.3489 \pm 0.04043

Table S2. Sperm quality values (mean \pm s.e.) for the groups before and after treatment.

	Concentration (10⁸ cells/mL)	Total motility (%)	Progressive motility (%)	Slow cells (%)	Medium cells (%)	Fast cells (%)
Control group						
Day 0	36.21 \pm 12.19	26.44 \pm 6.528	14.33 \pm 3.979	6.67 \pm 1.953	9.250 \pm 2.094	12.00 \pm 2.464
Day 21	30.19 \pm 10.15	29.97 \pm 6.194	15.13 \pm 5.534	5.500 \pm 1.180	9.625 \pm 3.610	10.38 \pm 4.071
Maltodextrin group						
Day 0	10.29 \pm 3.015	24.56 \pm 5.528	11.63 \pm 3.679	5.286 \pm 1.248	8.286 \pm 1.960	12.43 \pm 3.100
Day 21	41.57 \pm 18.16	24.97 \pm 6.766	11.00 \pm 3.964	4.875 \pm 1.457	8.500 \pm 2.368	8.625 \pm 3.082
Probiotic group						
Day 0	44.58 \pm 16.40	28.39 \pm 6.463	15.22 \pm 4.713	5.444 \pm 1.617	9.778 \pm 2.924	12.44 \pm 3.594
Day 21	110.10 \pm 23.13 ^{# **}	48.36 \pm 7.319 ^{¥ **}	22.73 \pm 5.092 ^{¥ **}	9.455 \pm 1.729 ^{¥ *}	14.82 \pm 2.860 ^{¥ *}	19.82 \pm 4.018 ^{¥ *}

[#]Wilcoxon test for paired samples; [¥]t-Student test for paired samples; (*) p<0.050; (**) p<0.010.

Table S3. Novel tank values for behaviour estimators (mean \pm s.e.) for the groups before and after treatment.

	N. of crossings	Scores in the top (%)
Control group		
Day 0	14.58 \pm 1.909	44.94 \pm 8.674
Day 21	17.00 \pm 3.389	53.05 \pm 8.521
Maltodextrin group		
Day 0	10.00 \pm 2.532	51.07 \pm 10.93
Day 21	11.50 \pm 2.626	28.38 \pm 8.157
Probiotic group		
Day 0	8.417 \pm 2.006	43.99 \pm 10.73
Day 21	17.67 \pm 3.467 \ddagger *	48.24 \pm 8.373

\ddagger t-Student test for paired samples; (*) p<0.050

Figure S1. Before-after graphs for (A) Concentration, (B) total motility and (C) progressive motility at 0 and 21 days obtained for each experimental group. "M" and "P" refers to the experimental groups: control and maltodextrin respectively. "M#" indicates the number of the male.

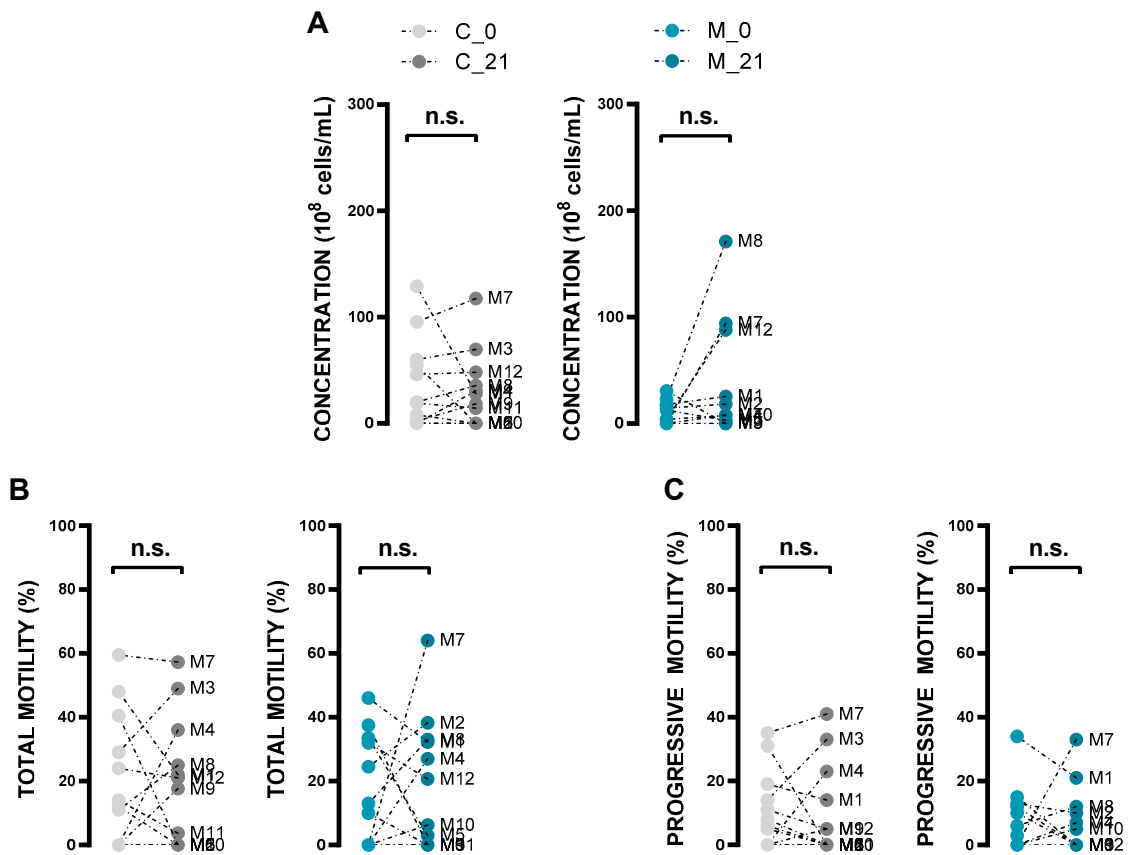


Figure S2. (A) PCA analysis for Computer Assisted Sperm Analysis (CASA) variables for probiotic-fed group. (B) Representation of the experimental group in a principal component plane.

