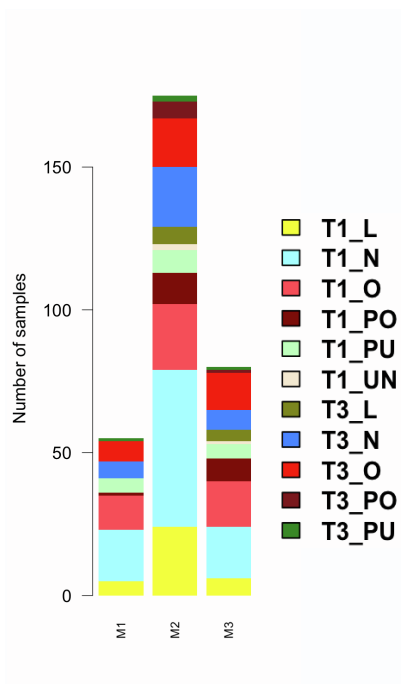


## **Supplemental information**

### **Disrupted gut microbiome networks and unhealthy behaviors predict metabolic dysfunction in children and adolescents in the long term**

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**Supplementary Figure 1. Gut microbiome configurations in children/adolescents in relation to time and weight status.** Bar plots showing the number of children/adolescents included in each gut microbiome configuration (M1 to M3), stratified by time and weight status. Color coding: yellow, T1 individuals who showed a downward change in weight status at T3 compared to T1 (T1\_L); cyan, individuals with normal weight at T1 who were also normal weight at T3 (T1\_N); light red, individuals with normal weight at T1 who developed obesity at T3 (T1\_O); dark red, individuals with obesity at T1 who were also obese at T3 (T1\_PO); light green, individuals with underweight at T1 who were also underweight at T3 (T1\_PU); beige, individuals with underweight at T1 who returned to normal weight at T3 (T1\_UN); army green, T3 individuals who showed a downward change in weight status at T3 compared to T1 (T3\_L); light blue, individuals with normal weight at T3 who were also normal weight at T1 (T3\_N); red, individuals with obesity at T3 who were normal weight at T1 (T3\_O); heavy dark red, individuals with obesity at T3 who were also obese at T1 (T3\_PO); and forest green, individuals with underweight at T3 who were also underweight at T1 (T3\_PU). See also Supplementary Table 3.

**Supplementary Table 1. Characteristics of children/adolescents with stool samples at T1 and T3.** Participants were stratified by measurement time and weight status as follows: i) normal weight at T1 and excess weight gain at T3; ii) normal weight at T1 and T3; iii) overweight/obese at T1 and T3; iv) underweight at T1 and T3; and v) downward change in weight category at T3 compared to T1.

	Normal weight at T1 and excess weight gain at T3		Normal weight at T1 and T3		Overweight/obese at T1 and T3		Underweight at T1 and T3		Downward change in weight category		All	
	N	% (row)	N	% (row)	N	% (row)	N	% (row)	N	% (row)	N	% (row)
Total	38	41.30	33	35.87	7	7.61	4	4.35	10	10.87	92	100.00
	N	% (column)	N	% (column)	N	% (column)	N	% (column)	N	% (column)	N	% (column)
Sex of the child (male)	16	42.11	19	57.58	4	57.14	4	100.00	7	70.00	50	54.35
	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
Age (years) - T1	38	7.83	33	7.08	7	9.43	4	6.8	10	8.55	92	7.72
Age (years) - T3	38	11.69	33	11.10	7	13.3	4	10.8	10	12.6	92	11.66
Body Mass Index (kg/m <sup>2</sup> ) - T1	38	15.82	33	16.03	7	24.33	4	13.58	10	20.01	92	16.9
Body Mass Index (kg/m <sup>2</sup> ) - T3	38	19.95	33	17.38	7	27.16	4	14.48	10	20.5	92	19.4
Weight of participant (kg) - T1	38	27.93	33	26.35	7	52.29	4	20.45	10	39.28	92	30.12
Weight of participant (kg) - T3	38	48.65	33	40.90	7	76.37	4	31.3	10	54.77	92	47.89
Height of participant (cm) - T1	38	131.19	33	127.35	7	144.99	4	122.03	10	137.62	92	131.16
Height of participant (cm) - T3	38	154.44	33	152.42	7	166.63	4	146.08	10	161.61	92	155.06

**Supplementary Table 2. Characteristics of children/adolescents with stool samples only at T1.** Participants were stratified by measurement time and weight status as follows: i) normal weight at T1 and excess weight gain at T3; ii) normal weight at T1 and T3; iii) overweight/obese at T1 and T3; iv) underweight at T1 and T3; v) underweight at T1 and normal weight at T3; and vi) downward change in weight category at T3 compared to T1.

	Normal weight at T1 and excess weight gain at T3		Normal weight at T1 and T3		Overweight/obese at T1 and T3		Underweight at T1 and T3		Underweight at T1 and normal weight at T3		Downward change in weight category		All	
	N	% (row)	N	% (row)	N	% (row)	N	% (row)	N	% (row)	N	% (row)	N	% (row)
Total	17	13.49	56	44.44	12	9.52	14	11.11	3	2.38	24	19.05	126	100.00
Sex of the child (male)	N	% (column)	N	% (column)	N	% (column)	N	% (column)	N	% (column)	N	% (column)	N	% (column)
	9	52.94	33	58.93	4	33.33	8	57.14	2	66.67	11	45.83	55	53.17
	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
Age (years) - T1	17	8.72	56	8.43	12	7.73	14	8.04	3	8.03	24	8.62	126	8.39
Age (years) - T3	17	12.56	56	12.15	12	11.36	14	11.72	3	11.57	24	12.48	126	12.13
Body Mass Index (kg/m <sup>2</sup> ) - T1	17	15.99	56	16.43	12	21.15	14	13.6	3	14.1	24	17.59	126	16.67
Body Mass Index (kg/m <sup>2</sup> ) - T3	17	20.07	56	17.98	12	24.99	14	14.89	3	16.37	24	18.01	126	18.55
Weight of participant (kg) - T1	17	28.11	56	29.53	12	39.11	14	22.87	3	23.7	24	33.29	126	30.09
Weight of participant (kg) - T3	17	48.61	56	44.47	12	62.7	14	33.54	3	39.2	24	46.36	126	45.78
Height of participant (cm) - T1	17	132.25	56	133.35	12	134.86	14	129.44	3	129.2	24	135.59	126	133.24
Height of participant (cm) - T3	17	155.15	56	156.18	12	157.25	14	149.57	3	152.7	24	158.6	126	155.78

**Supplementary Table 3. Summary of the recruited children/adolescents, along with information on gender, age, weight group and gut microbiome cluster of their fecal samples.** Those without an "m" before their ID were from our previous publication [S1]. Weight group: T1 individuals who showed a downward change in weight status at T3 compared to T1 (T1\_L); individuals with normal weight at T1 who were also normal weight at T3 (T1\_N); individuals with normal weight at T1 who developed obesity at T3 (T1\_O); individuals with obesity at T1 who were also obese at T3 (T1\_PO); individuals with underweight at T1 who were also underweight at T3 (T1\_PU); individuals with underweight at T1 who returned to normal weight at T3 (T1\_UN); T3 individuals who showed a downward change in weight status at T3 compared to T1 (T3\_L); individuals with normal weight at T3 who were also normal weight at T1 (T3\_N); individuals with obesity at T3 who were normal weight at T1 (T3\_O); individuals with obesity at T3 who were also obese at T1 (T3\_PO); and individuals with underweight at T3 who were also underweight at T1 (T3\_PU). Gut microbiome cluster: M1 to M3. The previous assignment to the C1–C4 clusters is provided for samples from Rampelli et al. [S1]. See also Supplementary Figure 1.

Sample ID	Gender	Age (years)	Individual ID	Weight group	Gut microbiome cluster from the present study	Gut microbiome cluster from Rampelli et al. [S1]
IDE13	Male	9.4	2	T1_N	M2	C1
IFA54	Male	13.1	2	T3_N	M2	C2
IDE18	Female	9.4	3	T1_N	M2	C2
IFA62	Female	13.6	3	T3_N	M2	C2
IDE10	Female	6.5	6	T1_O	M2	C2
IFA45	Female	10.7	6	T3_O	M2	C2
IDE17	Male	9.3	7	T1_O	M2	C1
IFA50	Male	13.3	7	T3_O	M2	C1
IDE19	Female	9.1	9	T1_O	M2	C2
IFA46	Female	13	9	T3_O	M2	C2
IDE1	Male	10.2	11	T1_N	M2	C2
IFA59	Male	14.6	11	T3_N	M2	C2
IDE3	Female	9.3	12	T1_O	M3	C3
IFA47	Female	13.3	12	T3_O	M3	C1
IDE16	Female	9.7	14	T1_N	M2	C2
IFA63	Female	13.9	14	T3_N	M3	C2
IDE15	Female	9.5	16	T1_N	M2	C1
IFA60	Female	13.7	16	T3_N	M2	C1
IDE7	Female	10	17	T1_O	M3	C2
IFA65	Female	13.6	17	T3_O	M3	C3
IDE14	Female	9.5	18	T1_O	M2	C1
IFA44	Female	13.8	18	T3_O	M3	C1
IDE61	Male	10	20	T1_N	M2	C2
IFA52	Male	13.8	20	T3_N	M2	C2
IDE62	Male	6.7	21	T1_N	M2	C1
IFA68	Male	10.8	21	T3_N	M2	C2

IDE64	Female	9.2	22	T1_O	M2	C1
IFA67	Female	13	22	T3_O	M3	C1
IDE68	Female	9.9	23	T1_O	M2	C1
IFA51	Female	13.7	23	T3_O	M2	C1
IDE59	Male	9.7	24	T1_N	M1	C3
IFA56	Male	13.5	24	T3_N	M1	C3
IDE48	Male	10.2	26	T1_N	M3	C1
IFA49	Male	14.1	26	T3_N	M2	C2
IDE60	Female	9.7	27	T1_O	M2	C2
IFA53	Female	13.5	27	T3_O	M2	C2
IDE65	Female	4.6	29	T1_N	M2	C1
IFA57	Female	8.5	29	T3_N	M2	C2
IDE9	Male	8	30	T1_N	M2	C1
IFA58	Male	12	30	T3_N	M2	C1
IDE63	Female	9.4	31	T1_O	M2	C2
IFA55	Female	13.2	31	T3_O	M2	C2
IDE70	Male	4.6	33	T1_N	M2	C2
IFA61	Male	8.6	33	T3_N	M2	C2
IDE4	Male	6	34	T1_N	M2	C3
IFA13	Male	10.2	34	T3_N	M2	C2
IDE50	Female	6.4	35	T1_N	M2	C2
IFA25	Female	10.5	35	T3_N	M2	C2
IDE56	Male	6.8	36	T1_N	M1	C3
IFA30	Male	10.8	36	T3_N	M3	C1
IDE55	Female	6.7	37	T1_O	M2	C2
IFA64	Female	10.7	37	T3_O	M2	C1
IDE52	Female	5.8	39	T1_O	M3	C1
IFA17	Female	9.8	39	T3_O	M2	C1
IDE49	Female	7	40	T1_N	M2	C1
IFA9	Female	11.1	40	T3_N	M2	C2
IDE6	Female	9.1	41	T1_N	M1	C2
IFA10	Female	13.4	41	T3_N	M1	C3
IDE53	Male	5.8	46	T1_N	M2	C2
IFA24	Male	9.7	46	T3_N	M2	C1
IDE51	Female	4.7	48	T1_N	M2	C2
IFA28	Female	8.9	48	T3_N	M2	C1
IDE2	Male	4.7	49	T1_N	M2	C3
IFA33	Male	8.9	49	T3_N	M2	C1
IDE66	Female	6.8	51	T1_O	M2	C2
IFA48	Female	11	51	T3_O	M2	C1
IDE67	Male	4.8	52	T1_N	M2	C1
IFA23	Male	8.9	52	T3_N	M2	C1
IDE5	Female	5.5	53	T1_N	M2	C2
IFA18	Female	9.5	53	T3_N	M2	C2
IDE11	Female	6.9	54	T1_N	M2	C2
IFA20	Female	10.8	54	T3_N	M2	C2
IDE57	Female	5.8	55	T1_N	M2	C2

IFA26	Female	9.8	55	T3_N	M2	C2
IDE58	Male	6.1	57	T1_N	M2	C1
IFA29	Male	10.3	57	T3_N	M2	C2
IDE12	Female	4.9	58	T1_O	M2	C3
IFA21	Female	8.9	58	T3_O	M2	C1
IDE8	Male	5.1	59	T1_N	M2	C1
IFA22	Male	8.9	59	T3_N	M3	C1
IDE69	Female	5.1	60	T1_O	M2	C2
IFA66	Female	9	60	T3_O	M3	C1
IDE54	Male	5.2	61	T1_O	M2	C2
IFA19	Male	9.1	61	T3_O	M1	C3
IDE25	Male	8.8	62	T1_N	M1	C4
IFA12	Male	12.7	62	T3_N	M1	C4
IDE28	Female	4.3	63	T1_N	M1	C4
IFA16	Female	8.2	63	T3_N	M1	C4
IDE32	Male	8.7	65	T1_O	M3	C3
IFA32	Male	12.9	65	T3_O	M3	C3
IDE27	Male	9.5	66	T1_N	M3	C1
IFA31	Male	13.8	66	T3_N	M3	C1
IDE26	Male	7.9	67	T1_O	M3	C3
IFA11	Male	11.7	67	T3_O	M3	C3
IDE42	Male	4.7	69	T1_O	M3	C3
IFA27	Male	8.5	69	T3_O	M3	C3
IDE20	Female	9.6	71	T1_O	M2	C3
IFA6	Female	13.7	71	T3_O	M2	C1
IDE33	Female	5.8	72	T1_N	M3	C3
IFA3	Female	9.7	72	T3_N	M3	C1
IDE21	Male	8.5	73	T1_O	M2	C2
IFA1	Male	12.2	73	T3_O	M2	C3
IDE38	Female	8.6	74	T1_O	M2	C3
IFA2	Female	12.4	74	T3_O	M2	C2
IDE40	Male	5.6	75	T1_N	M1	C3
IFA4	Male	9.3	75	T3_N	M1	C3
IDE39	Male	6.1	76	T1_O	M1	C4
IFA14	Male	9.4	76	T3_O	M1	C3
IDE31	Male	4.7	77	T1_N	M1	C4
IFA5	Male	8.8	77	T3_N	M3	C1
IDE29	Male	10.3	78	T1_O	M2	C2
IFA43	Male	14.1	78	T3_O	M2	C2
IDE30	Male	5.9	80	T1_O	M3	C3
IFA69	Male	9.7	80	T3_O	M1	C4
IDE37	Female	6.2	81	T1_O	M1	C4
IFA42	Female	10	81	T3_O	M1	C3
IDE24	Male	11.1	82	T1_O	M3	C3
IFA70	Male	15.2	82	T3_O	M1	C4
IDE22	Male	11	83	T1_O	M1	C3
IFA35	Male	15	83	T3_O	M1	C3

IDE41	Female	9.8	84	T1_N	M1	C4
IFA8	Female	13.8	84	T3_N	M1	C4
IDE36	Male	6.6	85	T1_O	M3	C1
IFA37	Male	10.5	85	T3_O	M2	C2
IDE35	Male	9.3	86	T1_O	M3	C3
IFA41	Male	13.4	86	T3_O	M3	C3
IDE43	Female	9.9	87	T1_O	M3	C3
IFA38	Female	13.2	87	T3_O	M3	C3
IDE45	Male	7.2	88	T1_O	M1	C4
IFA39	Male	10.5	88	T3_O	M3	C3
IDE46	Male	8	91	T1_O	M1	C4
IFA7	Male	11.8	91	T3_O	M1	C4
IDE23	Male	4.4	93	T1_N	M2	C1
IFA15	Male	7.9	93	T3_N	M3	C3
IDE44	Female	5.5	95	T1_O	M1	C3
IFA36	Female	8.8	95	T3_O	M3	C3
IDE47	Female	5.5	96	T1_O	M1	C4
IFA34	Female	8.8	96	T3_O	M2	C4
IDE34	Female	7.4	97	T1_O	M1	C3
IFA40	Female	8.9	97	T3_O	M3	C3
IDE145	Female	10	m1	T1_PO	M2	New sample
IFA71	Female	14	m1	T3_PO	M2	New sample
IDE154	Female	10.1	m10	T1_PO	M2	New sample
IDE168	Female	10.5	m100	T1_N	M1	New sample
IDE169	Male	9.1	m101	T1_N	M3	New sample
IDE170	Female	7.4	m102	T1_PU	M2	New sample
IDE171	Male	9.4	m103	T1_O	M3	New sample
IDE172	Female	9.6	m104	T1_O	M3	New sample
IDE173	Male	10.3	m105	T1_N	M2	New sample
IDE174	Male	10.2	m106	T1_UN	M3	New sample
IDE175	Male	10.3	m107	T1_N	M3	New sample
IDE176	Female	7.5	m108	T1_PO	M2	New sample
IDE177	Male	7.3	m109	T1_N	M2	New sample
IDE161	Female	9.2	m11	T1_L	M3	New sample
IDE178	Male	8.6	m110	T1_O	M2	New sample
IDE180	Female	8.7	m112	T1_N	M2	New sample
IDE181	Female	8.6	m113	T1_N	M2	New sample
IDE182	Female	8.8	m114	T1_N	M2	New sample
IDE183	Male	10.1	m115	T1_N	M2	New sample
IDE184	Female	9	m116	T1_N	M1	New sample
IDE185	Female	8.6	m117	T1_O	M3	New sample
IDE186	Male	9.2	m118	T1_N	M3	New sample
IDE187	Female	8.6	m119	T1_O	M2	New sample
IDE150	Male	9.8	m12	T1_PO	M3	New sample
IFA82	Male	13.6	m12	T3_PO	M2	New sample
IDE188	Male	5.7	m120	T1_N	M1	New sample
IDE189	Male	7.6	m121	T1_O	M3	New sample

IDE190	Male	8.5	m122	T1_L	M2	New sample
IDE191	Male	7.2	m123	T1_N	M2	New sample
IDE192	Male	9.8	m124	T1_L	M3	New sample
IDE193	Male	9.3	m125	T1_O	M2	New sample
IDE194	Male	6.6	m126	T1_N	M1	New sample
IDE195	Female	5.5	m127	T1_PU	M1	New sample
IDE196	Female	8.8	m128	T1_N	M1	New sample
IDE197	Female	9	m129	T1_PU	M2	New sample
IDE152	Male	10.8	m13	T1_PO	M3	New sample
IFA83	Male	14.6	m13	T3_PO	M2	New sample
IDE199	Male	8.8	m130	T1_N	M3	New sample
IDE202	Male	8.3	m131	T1_PO	M3	New sample
IDE203	Female	4.9	m132	T1_L	M1	New sample
IDE205	Male	10.6	m133	T1_N	M2	New sample
IDE207	Male	7.3	m134	T1_PU	M1	New sample
IDE208	Male	9.5	m135	T1_PU	M3	New sample
IDE209	Male	6.9	m136	T1_N	M1	New sample
IDE210	Female	6.6	m137	T1_PU	M1	New sample
IDE211	Female	6.9	m138	T1_L	M1	New sample
IDE212	Female	7.7	m139	T1_L	M3	New sample
IDE156	Female	10.3	m14	T1_L	M2	New sample
IFA84	Female	14	m14	T3_L	M2	New sample
IDE213	Female	10.2	m140	T1_PO	M2	New sample
IDE214	Female	9.1	m141	T1_L	M2	New sample
IDE215	Female	9.9	m142	T1_N	M3	New sample
IDE216	Male	9.6	m143	T1_N	M2	New sample
IDE217	Female	9.8	m144	T1_L	M2	New sample
IDE218	Female	6.1	m145	T1_N	M2	New sample
IDE219	Female	6	m146	T1_N	M2	New sample
IDE220	Female	9.9	m147	T1_PO	M3	New sample
IDE200	Female	6.7	m148	T1_PO	M2	New sample
IDE201	Male	8	m149	T1_PU	M1	New sample
IDE132	Male	10.1	m15	T1_L	M2	New sample
IFA85	Male	13.9	m15	T3_L	M3	New sample
IDE204	Male	7.6	m150	T1_PO	M3	New sample
IDE143	Male	4.8	m16	T1_PO	M2	New sample
IFA86	Male	8.6	m16	T3_PO	M2	New sample
IDE158	Male	9.3	m17	T1_PU	M3	New sample
IFA87	Male	13.5	m17	T3_PU	M1	New sample
IDE147	Male	11	m18	T1_PO	M2	New sample
IFA88	Male	14.7	m18	T3_PO	M2	New sample
IDE136	Male	4.4	m19	T1_L	M2	New sample
IFA89	Male	8.6	m19	T3_L	M2	New sample
IDE162	Male	5.2	m2	T1_PU	M2	New sample
IFA72	Male	9.5	m2	T3_PU	M3	New sample
IDE139	Male	6.9	m20	T1_L	M1	New sample
IFA90	Male	11.1	m20	T3_L	M3	New sample

IDE159	Male	10.1	m21	T1_L	M2	New sample
IFA91	Male	14.4	m21	T3_L	M2	New sample
IDE146	Male	9.3	m22	T1_L	M2	New sample
IFA92	Male	13.6	m22	T3_L	M2	New sample
IDE130	Male	6.1	m23	T1_PU	M2	New sample
IFA93	Male	10.1	m23	T3_PU	M2	New sample
IDE95	Female	9.4	m24	T1_L	M1	New sample
IFA94	Female	13.6	m24	T3_L	M3	New sample
IDE71	Male	9.3	m25	T1_N	M3	New sample
IDE72	Female	7.5	m26	T1_PO	M3	New sample
IDE73	Female	8.9	m27	T1_N	M3	New sample
IDE74	Female	8.7	m28	T1_N	M2	New sample
IDE75	Female	8.7	m29	T1_N	M2	New sample
IDE138	Female	6	m3	T1_L	M2	New sample
IFA73	Female	10	m3	T3_L	M2	New sample
IDE76	Male	9.5	m30	T1_PU	M3	New sample
IDE77	Male	9.3	m31	T1_N	M3	New sample
IDE79	Male	9.9	m33	T1_L	M2	New sample
IDE80	Male	8.3	m34	T1_N	M2	New sample
IDE81	Female	9.9	m35	T1_N	M2	New sample
IDE82	Male	7.4	m36	T1_L	M2	New sample
IDE83	Female	8.4	m37	T1_N	M2	New sample
IDE84	Female	9.1	m38	T1_UN	M2	New sample
IDE85	Female	5.3	m39	T1_PO	M2	New sample
IDE155	Female	9.8	m4	T1_O	M2	New sample
IFA74	Female	14.1	m4	T3_O	M2	New sample
IDE86	Female	9	m40	T1_O	M1	New sample
IDE87	Female	7.6	m41	T1_L	M2	New sample
IDE88	Female	5.3	m42	T1_N	M2	New sample
IDE89	Male	9.2	m43	T1_N	M2	New sample
IDE90	Female	10.5	m44	T1_L	M2	New sample
IDE91	Male	7	m45	T1_O	M1	New sample
IDE92	Male	6.8	m46	T1_PU	M3	New sample
IDE93	Female	8.4	m47	T1_L	M2	New sample
IDE94	Male	8.3	m48	T1_N	M2	New sample
IDE97	Female	4.4	m49	T1_O	M1	New sample
IDE198	Male	8.4	m5	T1_L	M1	New sample
IFA75	Male	12.4	m5	T3_L	M3	New sample
IDE98	Male	6.2	m50	T1_PO	M3	New sample
IDE99	Male	9.7	m51	T1_N	M3	New sample
IDE100	Female	10	m52	T1_O	M3	New sample
IDE101	Male	6.4	m53	T1_PU	M3	New sample
IDE102	Female	9.4	m54	T1_PO	M2	New sample
IDE103	Female	7.2	m55	T1_L	M2	New sample
IDE104	Female	9.1	m56	T1_N	M3	New sample
IDE105	Male	6.2	m57	T1_N	M2	New sample
IDE106	Female	9.3	m58	T1_PU	M2	New sample

IDE107	Male	8.7	m59	T1_PO	M3	New sample
IDE96	Male	6.6	m6	T1_PU	M2	New sample
IFA76	Male	10.1	m6	T3_PU	M2	New sample
IDE108	Male	9.7	m60	T1_N	M1	New sample
IDE109	Male	4.8	m61	T1_UN	M2	New sample
IDE110	Male	7.6	m62	T1_PU	M1	New sample
IDE111	Male	10.2	m63	T1_L	M2	New sample
IDE112	Male	7.8	m64	T1_N	M2	New sample
IDE113	Male	7.6	m65	T1_N	M3	New sample
IDE114	Female	7.1	m66	T1_N	M3	New sample
IDE115	Female	9.7	m67	T1_PU	M2	New sample
IDE116	Female	8.7	m68	T1_N	M2	New sample
IDE117	Male	9.2	m69	T1_N	M2	New sample
IDE206	Male	10.6	m7	T1_L	M2	New sample
IFA77	Male	14.4	m7	T3_L	M2	New sample
IDE118	Male	10.4	m70	T1_O	M1	New sample
IDE119	Male	8.7	m71	T1_L	M3	New sample
IDE120	Female	5.7	m72	T1_N	M3	New sample
IDE121	Female	9.8	m73	T1_O	M2	New sample
IDE122	Female	8.8	m74	T1_N	M2	New sample
IDE123	Female	9.1	m75	T1_L	M2	New sample
IDE124	Female	7.7	m76	T1_N	M2	New sample
IDE125	Female	10.5	m77	T1_L	M2	New sample
IDE126	Male	4.3	m78	T1_L	M2	New sample
IDE127	Female	8.2	m79	T1_N	M1	New sample
IDE133	Female	9.9	m8	T1_PO	M2	New sample
IFA78	Female	13.9	m8	T3_PO	M2	New sample
IDE128	Male	8.8	m80	T1_O	M2	New sample
IDE129	Male	10.7	m81	T1_L	M2	New sample
IDE131	Male	9.9	m82	T1_L	M2	New sample
IDE134	Male	4.5	m83	T1_N	M2	New sample
IDE135	Male	5.5	m84	T1_N	M2	New sample
IDE140	Female	10	m85	T1_L	M2	New sample
IDE141	Male	10.3	m86	T1_L	M3	New sample
IDE142	Female	5.5	m87	T1_PO	M1	New sample
IDE144	Male	9.5	m88	T1_N	M2	New sample
IDE148	Male	9.6	m89	T1_N	M2	New sample
IDE137	Female	9.7	m9	T1_PO	M2	New sample
IFA79	Female	13.7	m9	T3_PO	M3	New sample
IDE149	Male	9.9	m90	T1_PU	M2	New sample
IDE151	Male	4.1	m91	T1_N	M2	New sample
IDE153	Female	9.8	m92	T1_N	M1	New sample
IDE157	Male	10.3	m93	T1_N	M2	New sample
IDE160	Male	5.1	m94	T1_L	M2	New sample
IDE163	Male	10.1	m95	T1_N	M3	New sample
IDE164	Male	9.4	m96	T1_N	M1	New sample
IDE165	Female	10.3	m97	T1_L	M3	New sample

IDE166	Male	9.8	m98	T1_N	M3	New sample
IDE167	Male	8.4	m99	T1_N	M2	New sample

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### References

[S1] Rampelli, S., Guenther, K., Turrone, S., Wolters, M., Veidebaum, T., Kourides, Y., Molnár, D., Lissner, L., Benitez-Paez, A., Sanz, Y., et al. (2018). Pre-obese children's dysbiotic gut microbiome and unhealthy diets may predict the development of obesity. *Commun. Biol.* *1*, 222. <https://doi.org/10.1038/s42003-018-0221-5>.