## **Supplementary Material**

Available data obtained from the literature and used in the present study are shown here in Tables S1 to S5.

Table S1. Aurelia aurita collected in Vågsbøpollen, a semi-enclosed bay on the Norwegian west coast and used in "well-fed" tank feeding experiment. d = umbrella diameter, W = dry weight,  $W_{avg}$  = average dry weight,  $\mu$  = weight-specific growth rate. Based on recalculation of data for umbrella diameter versus time reported by Ishii & Båmstedt (1998, Fig. 4 therein) and their equation W =  $0.002d^{2.899}$  was used.

	d	W	$W_{avg}$	μ
Day	(mm)	(mg)	(mg)	$(\% d^{-1})$
21.4	38.9	81	105	
29.6	46.5	136	170	6.4
33.6	54.1	212	316	10.8
41.5	71.3	470	576	10.1
47.7	81.9	705	822	6.5
55.1	91.1	958	1161	4.2
62.3	104.0	1409	1630	5.3
70.7	115.1	1887	2289	3.5
77.6	131.5	2777		5.6
			Mean	6.55
			μ-avg	6.29

Table S2. *Aurelia aurita*. Data from two controlled feeding experiments conducted by Lüskow & Riisgård (2016, Tables 3 & 4) with jellyfish fed a maintained concentration of 5 *Artemia* sp. l<sup>-1</sup> at two temperatures.

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Day	d	W	$W_{ m avg}$	μ
	(mm)	(mg)	(mg)	$(\% d^{-1})$
Series #				
11.8 °C				
0	56.9	154.0	204.2	
5	69.5	270.7	327.2	11.3
11	79.5	395.4	425.2	6.3
18	83.7	457.2	487.6	2.1
24	87.6	519.9	548.6	2.1
32	91.0	578.8	580.6	1.3
39	91.2	582.4		0.1
Series #2				
17.1 °C				
0	5.5			
8	12.7	2.2	7.8	
28	30.8	27.3	38.9	12.5
35	39.6	55.4	68.9	101
42	46.2	85.6	99.2	6.2
48	51.3	115.0	135.4	4.9
55	57.6	159.4	215.3	4.7
63	71.3	290.9	306.0	7.5
69	73.9	321.8	344.2	1.7
77	77.5	368.0		1.7

Table S3. *Aurelia aurita* collected in Kertinge Nor (6 May to 22 July 2015) and Mariager Fjord (7 May to 29 July 2015). d = umbrella diameter, W = dry weight,  $W_{avg} =$  average dry w

	d	W	$W_{avg}$	μ
Day	(mm)	(mg)	(mg)	$(\% d^{-1})$
Kertinge Nor 2015				
0	14.7	3.5	5.4	
6	20.1	8.2	13.9	14.1
14	29.3	23.7	32.8	13.3
27	36.9	45.4	74.6	5.0
51	52.5	122.7	131.7	4.1
53	55.2	141.4	173.4	7.1
70	63.8	212.6	213.6	2.4
77	64.0	214.5		
Mariager Fjord 2015				
0	10.0	1.1	3.7	
12	22.8	11.7	17.3	19.4
42	30.1	25.6	24.7	2.6
54	29.4	23.9	31.0	-0.6*
69	35.3	40.1	51.7	3.4
82	42.3	66.7		3.9

Table S4. Aurelia aurita collected in Kagoshima Bay, Japan, in 1994. d = umbrella diameter, W = dry weight,  $W_{avg} =$  average dry weight,  $\mu =$  weight-specific growth rate. Based on Miyake et al. (1997, Fig. 3 therein).

Day	d	W	$W_{\mathrm{avg}}$	μ
	(mm)	(mg)	(mg)	$(\% d^{-1})$
15.9	14.3	3.1	7.0	
22.8	25.3	15.7	21.2	23.2
33.0	31.4	28.7	37.9	5.9
44.1	38.2	50.0	64.9	5.0
52.9	45.9	84.2	172.0	5.9
68.7	76.2	351.1	350.6	9.0
82.9	76.1	350.1	374.1	0.0*
90.9	79.8	399.7	454.4	1.7
98.9	87.4	516.5		3.2

Table S5. Aurelia aurita collected in Vågsbøpollen on the Norwegian west coast, during the season. d = umbrella diameter, W = dry weight,  $W_{avg} =$  average dry weight,  $W_{avg} =$  ave

	d	W	$W_{avg}$	
Day	(mm)	(mg)	(mg)	$(\% d^{-1})$
21.4	3.89	81	101	5.5
29.6	4.53	127	157	10.6
33.6	5.26	195	257	7.0
41.5	6.36	339	368	2.7
47.7	6.74	400	499	6.0
70.7	7.07	460	481	1.3

## LITERATURE CITED

Ishii H, Båmstedt U (1998). Food regulation of growth and maturation in a natural population of *Aurelia aurita* (L.). J Plankton Res 20:805-816

Lüskow F, Riisgård HU (2016) Population predation impact of jellyfish (*Aurelia aurita*) controls the maximum umbrella size and somatic degrowth in temperate Danish waters (Kertinge Nor and Mariager Fjord). Vie et Milieu 66: 233-243

Miyake H, Iwao K, Kakinuma Y (1997). Life history and environment of *Aurelia aurita*. South Pacific Study 7:273-285