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Ontogenetic changes in stable isotope ($\delta^{13}C$ and $\delta^{15}N$) values in squid *Gonatus fabricii* (Cephalopoda) reveal its important ecological role in the Arctic

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Table S1. Rostral length and length–mass relationship equations in *Gonatus fabricii* in the Arctic in general and in west and east Greenland, and the Barents Sea. URL – upper rostral length, LRL – lower rostral length, ML – mantle length.

		General	West Greenland	East Greenland	Barents Sea
Upper rostral length	Sexes combined	$URL = 0.0543ML^{0.8725}$ (1) $n = 183, R^2 = 0.95, p = 0.010$	$URL = 0.0632ML^{0.8512}$ (22) $n = 99, R^2 = 0.93, p = 0.010$	$URL = 0.0588ML^{0.8861}$ (43) $n = 29, R^2 = 0.93, p = 0.010$	$URL = 0.0507ML^{0.8539}$ (64) $n = 67, R^2 = 0.95, p = 0.010$
	Females	$URL = 0.0532ML^{0.8778}$ (4) $n = 99, R^2 = 0.92, p = 0.010$	$URL = 0.0648ML^{0.8471}$ (23) $n = 44, R^2 = 0.93, p = 0.010$	$URL = 0.0638ML^{0.8759}$ (44) $n = 15, R^2 = 0.91, p = 0.024$	$URL = 0.0437ML^{0.8907}$ (65) $n = 39, R^2 = 0.94, p = 0.010$
	Males	$URL = 0.0551ML^{0.8681}$ (5) $n = 84, R^2 = 0.97, p = 0.009$	$URL = 0.0615ML^{0.856}$ (24) $n = 45, R^2 = 0.93, p = 0.010$	$URL = 0.0498ML^{0.9148}$ (45) $n = 14, R^2 = 0.93, p = 0.010$	$URL = 0.0689ML^{0.778}$ (66) $n = 28, R^2 = 0.98, p = 0.008$
Lower rostral length	Sexes combined	$LRL = 0.0592ML^{0.8528}$ (2) $n = 183, R^2 = 0.98, p = 0.009$	$LRL = 0.0596ML^{0.8496}$ (25) $n = 99, R^2 = 0.91, p = 0.023$	$LRL = 0.0597ML^{0.8771}$ (46) $n = 29, R^2 = 0.94, p = 0.010$	$LRL = 0.0648ML^{0.8206}$ (67) $n = 67, R^2 = 0.92, p = 0.011$
	Females	$LRL = 0.057ML^{0.8642}$ (6) $n = 99, R^2 = 0.98, p = 0.009$	$LRL = 0.0572ML^{0.8611}$ (26) $n = 44, R^2 = 0.91, p = 0.023$	$LRL = 0.0524ML^{0.9097}$ (47) $n = 15, R^2 = 0.91, p = 0.019$	$LRL = 0.0614ML^{0.8386}$ (68) $n = 39, R^2 = 0.92, p = 0.010$
	Males	$LRL = 0.0607ML^{0.8439}$ (7) $n = 84, R^2 = 0.98, p = 0.008$	$LRL = 0.0613ML^{0.8416}$ (27) $n = 45, R^2 = 0.91, p = 0.023$	$LRL = 0.0672ML^{0.8478}$ (48) $n = 14, R^2 = 0.96, p = 0.009$	$LRL = 0.0727ML^{0.7857}$ (69) $n = 28, R^2 = 0.93, p = 0.010$
Mantle length from upper rostral length	Sexes combined	$ML = 31.979URL^{0.9738}$ (8) $n = 183, R^2 = 0.95, p = 0.010$	$ML = 27.487URL^{1.0895}$ (28) $n = 99, R^2 = 0.93, p = 0.010$	$ML = 27.792URL^{0.9618}$ (49) $n = 29, R^2 = 0.93, p = 0.010$	$ML = 38.215URL^{0.8781}$ (70) $n = 67, R^2 = 0.95, p = 0.010$
	Females	$ML = 32.48URL^{0.9371}$ (9) $n = 99, R^2 = 0.92, p = 0.010$	$ML = 26.98URL^{1.0977}$ (29) $n = 44, R^2 = 0.93, p = 0.010$	$ML = 25.757URL^{1.0331}$ (50) $n = 15, R^2 = 0.91, p = 0.024$	$ML = 38.895URL^{0.8341}$ (71) $n = 39, R^2 = 0.94, p = 0.010$
	Males	$ML = 31.441URL^{1.0103}$ (10) $n = 84, R^2 = 0.97, p = 0.009$	$ML = 28.05URL^{1.0805}$ (30) $n = 45, R^2 = 0.93, p = 0.010$	$ML = 31.692URL^{0.908}$ (51) $n = 14, R^2 = 0.93, p = 0.010$	$ML = 36.058URL^{1.0033}$ (72) $n = 28, R^2 = 0.98, p = 0.008$

		General	West Greenland	East Greenland	Barents Sea
Mantle length from lower rostral length	Sexes combined	$ML = 30.579LRL^{1.03}$ (11) $n = 183, R^2 = 0.98, p = 0.009$	$ML = 30.032LRL^{1.067}$ (31) $n = 99, R^2 = 0.91, p = 0.023$	$ML = 29.66LRL^{0.9536}$ (52) $n = 29, R^2 = 0.94, p = 0.010$	$ML = 32.162LRL^{0.9992}$ (73) $n = 67, R^2 = 0.92, p = 0.011$
	Females	$ML = 30.431LRL^{1.0148}$ (12) $n = 99, R^2 = 0.98, p = 0.009$	$ML = 29.946LRL^{1.0526}$ (32) $n = 44, R^2 = 0.91, p = 0.023$	$ML = 27.97LRL^{1.033}$ (53) $n = 15, R^2 = 0.91, p = 0.019$	$ML = 31.859LRL^{0.981}$ (74) $n = 39, R^2 = 0.92, p = 0.010$
	Males	$ML = 30.821LRL^{1.0432}$ (13) $n = 84, R^2 = 0.98, p = 0.008$	$ML = 30.2LRL^{1.0767}$ (33) $n = 45, R^2 = 0.91, p = 0.023$	$ML = 31.631LRL^{0.901}$ (54) $n = 14, R^2 = 0.96, p = 0.009$	$ML = 32.137LRL^{1.0494}$ (75) $n = 28, R^2 = 0.93, p = 0.010$
Mass from upper rostral length	Sexes combined	$Mass = 1.5783URL^{2.5107}$ (14) $n = 183, R^2 = 0.97, p = 0.009$	$Mass = 0.9548URL^{2.8638}$ (34) $n = 99, R^2 = 0.95, p = 0.010$	$Mass = 1.7324URL^{2.2437}$ (55) $n = 29, R^2 = 0.97, p = 0.009$	$Mass = 2.7046URL^{2.1642}$ (76) $n = 67, R^2 = 0.97, p = 0.009$
	Females	$Mass = 1.6517URL^{2.447}$ (15) $n = 99, R^2 = 0.95, p = 0.010$	$Mass = 0.9669URL^{2.8713}$ (35) $n = 44, R^2 = 0.95, p = 0.010$	$Mass = 1.2031URL^{2.5421}$ (56) $n = 15, R^2 = 0.92, p = 0.013$	$Mass = 2.697URL^{2.1257}$ (77) $n = 39, R^2 = 0.97, p = 0.009$
	Males	$Mass = 1.4942URL^{2.5804}$ (16) $n = 84, R^2 = 0.98, p = 0.007$	$Mass = 0.939URL^{2.8614}$ (36) $n = 45, R^2 = 0.95, p = 0.010$	$Mass = 2.3603URL^{2.0012}$ (57) $n = 14, R^2 = 0.98, p = 0.007$	$Mass = 2.6416URL^{2.2719}$ (78) $n = 28, R^2 = 0.92, p = 0.012$
Mass from lower rostral length	Sexes combined	$Mass = 1.4139LRL^{2.6509}$ (17) $n = 183, R^2 = 0.98, p = 0.008$	$Mass = 1.2036LRL^{2.8063}$ (37) $n = 99, R^2 = 0.95, p = 0.010$	$Mass = 1.845LRL^{2.2313}$ (58) $n = 29, R^2 = 0.96, p = 0.010$	$Mass = 1.8405LRL^{2.4138}$ (79) $n = 67, R^2 = 0.98, p = 0.007$
	Females	$Mass = 1.4055LRL^{2.6326}$ (18) $n = 99, R^2 = 0.98, p = 0.008$	$Mass = 1.2603LRL^{2.7642}$ (38) $n = 44, R^2 = 0.95, p = 0.010$	$Mass = 1.4597LRL^{2.4791}$ (59) $n = 15, R^2 = 0.94, p = 0.012$	$Mass = 1.6753LRL^{2.4493}$ (80) $n = 39, R^2 = 0.98, p = 0.007$
	Males	$Mass = 1.4281LRL^{2.6667}$ (19) $n = 84, R^2 = 0.98, p = 0.008$	$Mass = 1.1471LRL^{2.8454}$ (39) $n = 45, R^2 = 0.95, p = 0.010$	$Mass = 2.34661LRL^{2.0875}$ (60) $n = 14, R^2 = 0.96, p = 0.010$	$Mass = 2.1095LRL^{2.3581}$ (81) $n = 28, R^2 = 0.93, p = 0.011$
Length-mass relationship	Sexes combined	$Mass = 0.0003ML^{2.4777}$ (3) $n = 183, R^2 = 0.97, p = 0.009$	$Mass = 0.0002ML^{2.5748}$ (49) $n = 99, R^2 = 0.98, p = 0.008$	$Mass = 0.0001ML^{2.2458}$ (61) $n = 29, R^2 = 0.96, p = 0.009$	$Mass = 0.0006ML^{2.3466}$ (82) $n = 67, R^2 = 0.95, p = 0.010$
	Females	$Mass = 0.0003ML^{2.4961}$ (20) $n = 99, R^2 = 0.97, p = 0.009$	$Mass = 0.0002ML^{2.5708}$ (41) $n = 44, R^2 = 0.98, p = 0.008$	$Mass = 0.0006ML^{2.3862}$ (62) $n = 15, R^2 = 0.96, p = 0.009$	$Mass = 0.0005ML^{2.4064}$ (83) $n = 39, R^2 = 0.95, p = 0.010$
	Males	$Mass = 0.0003ML^{2.4657}$ (21) $n = 84, R^2 = 0.96, p = 0.009$	$Mass = 0.0002ML^{2.5877}$ (42) $n = 45, R^2 = 0.98, p = 0.009$	$Mass = 0.0016ML^{2.1224}$ (63) $n = 14, R^2 = 0.97, p = 0.009$	$Mass = 0.0009ML^{2.2458}$ (84) $n = 28, R^2 = 0.95, p = 0.010$

Table S2. Review of the known prey of *Gonatus fabricii*.

Phylum	Class	Order	Species	References
Arthropoda	Maxillopoda	Calanoida	*Calanus finmarchicus*	Nesis 1965, Wiborg 1980, 1982, Wiborg et al. 1982, 1984, Sennikov et al. 1989, Jereb et al. 2015
			Calanus hyperboreus	Nesis 1965, Sennikov et al. 1989, Jereb et al. 2015
			Metridia longa	Bodini et al. 2009
			Metridia sp.	Nesis 1965, Jereb et al. 2015
			Euchaeta sp.	Wiborg et al. 1984, Jereb et al. 2015
			Paraeuchaeta norvegica	Nesis 1965, Wiborg 1980, 1982, Wiborg et al. 1982, Sennikov et al. 1989, Jereb et al. 2015
			Temora sp.	Wiborg et al. 1984, Jereb et al. 2015
			Calanoida g. sp.	Nesis 1971, Wiborg 1980, 1982, Sennikov et al. 1989, Jereb et al. 2015
		Cyclopoida	*Oithona similis*	Bodini et al. 2009
	Malacostraca	Mysidacea	Mysidacea g. sp.	Kristensen 1984, Jereb et al. 2015
		Euphausiacea	*Thysanoessa longicaudata*	Nesis 1965, Sennikov et al. 1989, Bodini et al. 2009, Jereb et al. 2015
			Thysanoessa raschii	Sennikov et al. 1989
			Thysanoessa inermis	Sennikov et al. 1989, Bodini et al. 2009
			Thysanoessa sp.	Sennikov et al. 1989
			Meganyctiphanes norvegicus	Wiborg 1980, 1982, Wiborg et al. 1982, 1984, Sennikov et al. 1989, Jereb et al. 2015
			Euphausiacea g. sp.	Zuev & Nesis 1971, Sennikov et al. 1989, Jereb et al. 2015
		Amphipoda	*Hyperia galba*	Nesis 1965, Jereb et al. 2015
			Themisto gaudichaudi	Wiborg 1982, Wiborg at el. 1982, Sennikov et al. 1989, Bodini et al. 2009, Jereb et al. 2015
			Themisto libellula	Wiborg 1982, Wiborg at el. 1982, Sennikov et al. 1989, Bodini et al. 2009, Jereb et al., 2015
			Parathemisto abyssorum	Wiborg 1982, Wiborg at el. 1982, Sennikov et al. 1989, Bodini et al. 2009, Jereb et al. 2015
			Parathemisto sp.	Wiborg 1980, Kristensen 1984, Wiborg et al. 1984, Sennikov et al. 1989, Jereb et al. 2015
			Hyperiidae g. sp.	Kristensen 1984, Sennikov et al. 1989, Jereb et al. 2015

Phylum	Class	Order	Species	References
			Pseudalibrotus sp.	Nesis 1965, Jereb et al. 2015
			Lysianassidae g. sp.	Nesis 1971
			Amphipoda g. sp.	Nesis 1971, Wiborg 1980, Jereb et al. 2015
		Isopoda	Isopoda g. sp.	Kristensen 1984, Jereb et al. 2015
		Decapoda	*Pasiphaea* sp.	Kristensen 1984, Wiborg et al. 1984, Jereb et al. 2015
			Unidentified shrimps	Wiborg 1980, Kristensen 1984, Sennikov et al. 1989, Jereb et al. 2015
Mollusca	Bivalvia		Bivalvia g. sp. larvae	Wiborg 1980, 1982
	Gastropoda	Thecosomata	*Limacina retroversa*	Nesis 1965, Wiborg 1980, 1982, Wiborg et al. 1982, 1984, Sennikov et al. 1989, Jereb et al. 2015
		Gymnosomata	*Clione limacina*	Nesis 1965, Wiborg 1980, Jereb et al. 2015
	Cephalopoda	Oegopsida	*Gonatus fabricii*	Zuev & Nesis 1971, Wiborg 1980, 1982, Kristensen 1984, Sennikov et al. 1989, Jereb et al. 2015
			Oegopsida g. sp.	Zuev & Nesis 1971, Jereb et al. 2015
		Octopoda	Octopoda g. sp.	Zuev & Nesis 1971, Jereb et al. 2015
			Cephalopoda g. sp.	Kristensen 1984, Jereb et al. 2015
Chaetognatha	Sagittoidea	Aphragmophora	*Sagitta elegans*	Wiborg 1982
			Sagitta maxima	Nesis 1965
			Sagitta sp.	Nesis 1965, Wiborg 1980, 1982, Wiborg et al. 1982, 1984, Jereb et al. 2015
		Phragmophora	*Eukrohnia hamata*	Nesis 1971, Sennikov et al. 1989
			Eukhronia sp.	Wiborg 1980, 1982, Wiborg et al. 1982, 1984, Jereb et al. 2015
Chordata	Actinopterygii	Clupeiformes	*Clupea harengus*	Sennikov et al. 1989
		Stomiiformes	*Maurolicus muelleri*	Wiborg 1982, Sennikov et al. 1989, Jereb et al. 2015
		Osmeriformes	*Mallotus villosus*	Kristensen 1984, Sennikov et al. 1989, Jereb et al. 2015
		Myctophiformes	Myctophidae g. sp.	Zuev & Nesis 1971, Jereb et al. 2015
		Gadiformes	*Pollachius virens*	Bodini et al. 2009
		Scorpaeniformes	*Sebastes norvegicus*	Sennikov et al. 1989, Jereb et al. 2015
			Sebastes marinus	Kristensen 1984
			Sebastes sp.	Wiborg 1980, 1982, Sennikov et al. 1989
			Unidentified fish	Wiborg 1980, 1982, Wiborg et al. 1984, Sennikov et al. 1989

Table S3. Review of the known predators of *Gonatus fabricii*. The most important predators are in bold.

Phylum	Class	Order	Species	References
Mollusca	Cephalopoda	Oegopsida	*Illex illecebrosus*	Amaratunga 1980, Kristensen 1984
			Todarodes sagittatus	Wiborg 1972, Wiborg et al. 1982, Lordan et al. 2001, Jereb et al.2015
			Gonatus fabricii	Zuev & Nesis 1971, Wiborg 1980, 1982, Kristensen 1984, Sennikov et al. 1989, Jereb et al. 2015
Chordata	Chondrichthyes	Squaliformes	***Somniosus microcephalus***	Bjørke & Gjøsaeter 1998, Bjørke 2001, Yano et al. 2007
		Rajiformes	*Ambliraja radiata*	Templeman 1982
	Actinopterygii	Salmoniformes	***Salmo salar***	Lear 1980, Kristensen 1984, Jereb et al. 2015, Dixon et al. 2017
		Clupeiformes	*Clupea harengus*	Nesis 1965, Kristensen 1984
		Gadiformes	***Gadus morhua***	Grimpe 1933, Kristensen 1984, Sennikov et al. 1989, Mehl 1991, Bjørke & Gjøsaeter 1998, Bjørke 2001, Jereb et al. 2015
			Melanogrammus aeglefinus	Sennikov et al. 1989
			Pollachius virens	Sennikov et al. 1989, Bjørke & Gjøsaeter 1998, Bjørke 2001, Gardiner & Dick 2010
			Micromesistius poutassou	Sennikov et al. 1989, Dolgov et al. 2010
			Molva molva	Gundersen 1996
			Molva dypterygia	Bjørke & Gjøsaeter 1998, Bjørke 2001
			Coryphaenoides rupestris	Bergstad et al. 2010, Jereb et al. 2015
			Coryphaenoides armatus	Martin & Christiansen 1997
			Macrourus berglax	Sennikov et al. 1989
			Macrourus spp	Bjørke & Gjøsaeter 1998, Bjørke 2001, Gardiner & Dick 2010
		Anguilliformes	*Histiobranchus bathybius*	Martin & Christiansen 1997, Jereb et al. 2015
		Scorpaeniformes	***Sebastes marinus***	Nesis 1965, Kristensen 1984, Jereb et al. 2015

Phylum	Class	Order	Species	References
			Sebastes mentella	Sennikov et al. 1989
			***Sebastes* spp.**	Bjørke & Gjøsaeter 1998, Bjørke 2001, Gardiner & Dick 2010
		Pleuronectiformes	***Reinhardtius hippoglossoides***	Sennikov et al. 1989, Orr & Bowering 1997, Bjørke & Gjøsaeter 1998, Dawe et al. 1998, Michalsen et al. 1998, Bjelland et al. 2000, Bjørke 2001, Hovde et al. 2002, Vollen et al. 2004, Gardiner & Dick 2010, Jereb et al. 2015
			Hippoglossoides platessoides	Sennikov et al. 1989
		Perciformes	*Thunnus* sp.	Dragovich 1969
	Aves	Charadriiformes	*Uria lomvia*	Gaston & Noble 1985, Lydersen et al. 1989, Erikstad 1990, Barret et al. 1997, Falk & Durinck 1993, Gardiner & Dick 2010, Jereb et al. 2015
			Uria aalge	Barret et al. 1997; Gardiner & Dick 2010; Jereb et al. 2015
			Fratercula arctica	Lydersen et al. 1989, Falk et al. 1992, Jereb et al. 2015
			Rissa tridactyla	Erikstad 1990
			Cepphus grylle	Lydersen et al. 1989
		Procellariiformes	***Fulmarus glacialis***	Kristensen 1984, Lydersen et al. 1989, Erikstad 1990, Garthe et al. 2004, Jereb et al. 2015
	Mammalia	Carnivora	***Phoca groenlandica***	Lydersen et al. 1991, Klages 1996, Potelov et al. 1997, 2000, Bjørke & Gjøsaeter 1998, Lawson & Hobson 2000, Bjørke 2001, Haug et al. 2004, Gardiner & Dick 2010, Jereb et al. 2015
			Pusa hispida	Siegstad et al. 1998, Labansen et al. 2011
			Cystophora cristata	Wiborg 1979, Ross 1993, Potelov et al. 1997, 2000, Bjørke & Gjøsaeter 1998, Bjørke 2001, Haug et al. 2004, Gardiner & Dick 2010, Jereb et al. 2015
			Erignathus barbatus	Finley & Evans 1983, Gardiner & Dick 2010
		Cetacea	*Balaenoptera musculus*	Hjort & Ruud 1929, Jereb et al. 2015
			Balaenoptera acutorostra	Kristensen 1984
			Physeter macrocephalus	Clarke & Macleod 1976, Kristensen 1984, Clarke 1997, Bjørke & Gjøsaeter 1998, Santos et al. 1999, 2002, Bjørke 2001, Simon et al. 2003, Laidre et al. 2004, Mendes et al. 2007, Gardiner & Dick 2010, Jereb et al. 2015

Phylum	Class	Order	Species	References
			Hyperoodon ampullatus	Benjaminsen & Christensen 1979, Wiborg 1979, Clarke & Kristensen 1980, Kristensen 1984, Lick & Piatkowski 1998, Bjørke & Gjøsaeter 1998, Bjørke 2001, Hooker et al. 2001, Santos et al. 2001a, Laidre et al. 2004, MacLeod et al. 2004, Gardiner & Dick 2010, Jereb et al. 2015
			Monodon monoceros	Grimpe 1933, Finley & Gibb 1982, Kristensen 1984, Bjørke & Gjøsaeter 1998, Bjørke 2001, Laidre et al. 2004, Laidre & Heide-Jorgensen 2005, Gardiner & Dick 2010, Jereb et al. 2015
			Ziphius cavirostris	Blanco et al. 1997, Santos et al. 2001b, Jereb et al. 2015
			Globicephala melas	Nesis 1965, Desportes & Mouritsen 1988, 1993, Bjørke & Gjøsaeter 1998, Bjørke 2001, Gardiner & Dick, 2010, Jereb et al. 2015
			Delphinapterus leucas	Bjørke & Gjøsaeter 1998, Bjørke 2001, Gardiner & Dick 2010
			Mesoplodon bidens	Bjørke & Gjøsaeter 1998, Bjørke 2001, Gardiner & Dick 2010
			Orcinus orca	Christensen 1978
			Phocoena phocoena	Kinze 1989, 1990, Tielmann & Dietz 1995, Vikingsson et al. 2003
			Lagenorhynchus albirostris	Kovacs et al. 2009

Table S4. Values of δ^{15}N and trophic levels in the Arctic marine animals from the top positions in the marine food web. Values are ranges (and mean ± standard error in our study).

Group	Species	δ^{15}N(‰)	Trophic level	Reference
Invertebrates	Squid *Gonatus fabricii*	4.9 – 14.9 (8.7 ± 0.18)	2.5 – 5.1 (3.5 ± 0.05)*	Our study
	Squid *Gonatus fabricii*	11.4 – 14.8	2.9 – 3.9** / 2.8 – 4.2*	Lawson & Hobson 2000; Hooker et al. 2001, Linnebjerg et al. 2016
	Scavenging amphipods *Anonyx* spp.	12.4 – 16.9	3.4 – 4.0***	Dunton et al. 1989, Hobson et al. 2002, Tamelander et al. 2006
	Scavenging amphipods *Stegocephalus* spp.	14.5 – 15.7	3.6 – 4.1***	Hobson & Welch 1992, Tamelander et al. 2006
	Scavenging gastropods *Buccinum* spp.	11.9 – 17.1	2.9** (estimated by lower values only in the second reference)	Dunton et al. 1989, Hobson & Welch 1992
	Scavenging sea star *Crossaster papposus*	13.8 – 17.1	3.7 – 3.8***	Hobson & Welch 1992, Tamelander et al. 2006
	Sea star of unknown feeding type *Poraniomorpha tumida*	17.4	4.7****	Tamelander et al. 2006
Fish	Greenland shark *Somniosus microcephalus*	16.2 – 17.2	4.4** / 5.3*	Hansen et al. 2012, Linnebjerg et al. 2016
	Thorny skate *Ambliraja radiata*	14.6 – 15.0	3.8**	Hobson et al. 2002
	Atlantic cod *Gadus morphua*	13.9 – 15.5	3.6 – 4.0*** / 3.7 – 4.5*	Tamelander et al. 2006; Linnebjerg et al. 2016
	Polar cod *Boreogadus saida*	13.2 – 15.9	3.4 – 3.8*** / 3.5 – 3.9*	Hobson & Welch 1992, Hobson et al. 2002, Tamelander et al. 2006, Linnebjerg et al. 2016
	Greenland halibut *Reinhardtius hippoglossoides*	12.0 – 15.1	3.3 – 3.9*** / 3.3 – 4.3*	Tamelander et al. 2006, Linnebjerg et al. 2016
	American plaice *Hippoglossoides platessoides*	12.2 – 15.2	3.1 – 4.0*** / 3.1 – 3.7*	Tamelander et al. 2006, Linnebjerg et al. 2016

Group	Species	δ^{15}N(‰)	Trophic level	Reference
	Redfishes *Sebastes* spp.	10.9 – 15.3	2.8 – 3.6** / 2.7 – 3.9*	Hansen et al. 2012, Linnebjerg et al. 2016
	Seasnails *Liparis* spp.	12.4 – 15.4	2.5 – 3.5***	Hobson & Welch 1992, Tamelander et al. 2006
	Snakeblenny *Lumpenus lampraetaeformis*	14.8 – 15.2	4.0****	Tamelander et al. 2006
	Daubed shanny *Leptoclinus maculatus*	12.7 – 15.3	3.2 – 4.1*** / 3.3 – 3.7*	Tamelander et al. 2006, Linnebjerg et al. 2016
	Fish doctor *Gymnelus viridis*	15.7 – 16.7	3.8**	Hobson & Welch 1992
	Eelpouts *Lycodes* spp.	14.7 – 16.3	3.9 – 4.4****	Tamelander et al. 2006
	Spotted wolfish *Anarhichas minor*	13.6 – 14.8	3.5 – 3.9** / 3.6 – 4.2*	Linnebjerg et al. 2016
	Sculpin *Artediellus atlanticus*	15.5 – 15.9	4.2****	Tamelander et al. 2006
	Sculpin *Icelus bicornis*	13.1 – 16.1	3.4**	Hobson & Welch 1992
	Sculpin *Myoxocephalus scorpius*	14.5 – 16.1	3.6 – 4.1** / 4.0 – 4.8*	Hobson & Welch 1992, Linnebjerg et al. 2016
Seabirds	Glaucous gull *Larus hyperboreus*	15.9 – 17.9	4.4 – 4.6**	Hobson & Welch 1992, Hobson et al. 2002
	Seabirds from the Barents Sea to the Western Greenland	10.9 – 14.4	2.7 – 4.0** / 2.7 – 3.8*	Hobson et al. 2002, Linnebjerg t al. 2016
	Seabirds from the Canadian High Arctic	14.4 – 16.5	3.9 – 4.1**	Hobson & Welch 1992
Marine mammals	Walrus *Odobenus rosmarus*	11.9 – 15.4	2.9 – 3.6** / 3.8*	Hobson & Welch 1992, Walker & Macko 1999, Hobson et al. 2002, Linnebjerg et al. 2016
	Harp seal *Phoca groenlandica*	13.0 – 16.6	3.3 – 3.7** / 3.4 – 4.0*	Walker & Macko 1999, Lawson & Hobson 2000, Linnebjerg et al. 2016
	Bearded seal *Erignathus barbatus*	16.6 – 17.0	4.0 – 4.3**	Hobson & Welch 1992, Hobson et al. 2002
	Hooded seal *Cystophora cristata*	16.2 – 17.6	4.2 – 4.6** / 4.8 – 5.8*	Linnebjerg et al. 2016
	Ringed seal *Pusa hispida*	15.0 – 18.4	4.0 – 4.6** / 4.2 – 4.6*	Hobson & Welch 1992, Hobson

Group	Species	δ^{15}N(‰)	Trophic level	Reference
				et al. 2002, Linnebjerg et al. 2016
	Sperm whale *Physeter macrocephalus*	10.5 – 18.1	-	Walker & Macko 1999, Mendes et al. 2007
	Northern bottlenose whale *Hyperoodon ampullatus*	14.4 – 15.6	-	Hooker et al. 2001
	Narwhal *Monodon monoceros*	15.1 – 16.5	3.7 – 4.3** / 4.7 – 4.9*	Hobson & Welch 1992, Hobson et al. 2002, Linnebjerg et al. 2016
	Long-finned pilot whale *Globicephala melas*	12.8 – 15.1	-	Abend & Smith 1995
	Beluga whale *Delphinapterus leucas*	15.5 – 17.2	3.9 – 4.4** / 4.5 – 4.9*	Hobson & Welch 1992, Hobson et al. 2002, Linnebjerg et al. 2016
	Harbour porpoise *Phocoena phocoena*	12.1 – 18.1	-	Fontaine et al. 2007
	Killer whale *Orcinus orca*	16.3 – 19.9	-	Walker & Macko 1999
	Polar bear *Ursus maritimus*	20.2 – 21.7	5.1 – 5.6** / 8.6*	Hobson & Welch 1992, Hobson et al. 2002, Linnebjerg et al. 2016

* Estimated by the 'Arctic scaled model' (equation for the World Ocean with scaled trophic enrichment factor of δ^{15}N (TEF) (Hussey et al. 2014a, b), adapted for the Arctic (Linnebjerg et al. 2016));
** Estimated by the 'Arctic model' (equation for the Arctic with TEF 3.8 for all the taxa except birds and TEF 2.4 for birds (Hobson & Welch 1992, Hobson et al. 2002);
*** Estimated by different models in different references used;
**** Estimated by the 'classical model' (general classical equation for the World Ocean, TEF 3.4 (Post 2002)).

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