

Table S2. Carbon and nitrogen stable isotope composition of all samples

Sample*	$\delta^{13}\text{C}$ [‰]	$\delta^{15}\text{N}$ [‰]
CAFFBKBA1	-21.8	6.2
CAFFBKBA2	-21.8	6.3
CAFFBKBA3	-21.9	6.2
CAFFBKBB1	-21.6	6.1
CAFFBKBB2	-22.0	6.2
CAFFBKBB3	-21.8	6.1
CAFFBKBC1	-25.0	6.1
CAFFBKBC2	-24.6	6.3
CAFFBKBC3	-25.2	6.3
CAFFBKCA1	-17.5	2.2
CAFFBKCA2	-17.5	2.2
CAFFBKCA3	-17.6	2.3
CAFFBKCB1	-18.2	2.2
CAFFBKCB2	-17.0	2.7
CAFFBKCB3	-17.6	2.2
CAFFBKCC1	-17.7	2.3
CAFFBKCC2	-17.5	2.5
CAFFBKCC3	-17.8	2.6
CAFFBKFA1	-28.3	—†
CAFFBKFA2	-28.1	
CAFFBKFA3	-27.2	
CAFFBKFB1	-28.0	
CAFFBKFB2	-27.5	
CAFFBKFB3	-28.4	
CAFFBKFC1	-27.7	
CAFFBKFC2	-27.3	
CAFFBKFC3	-28.3	
CAFFMDBA1	-16.6	5.9
CAFFMDBA2	-16.9	6.0
CAFFMDBA3	-17.0	6.0
CAFFMDBB1	-17.0	6.0
CAFFMDBB2	-17.6	6.0
CAFFMDBB3	-17.7	5.8
CAFFMDBC1	-16.2	5.5
CAFFMDBC2	-16.5	5.7
CAFFMDBC3	-16.4	5.5
CAFFMDCA1	-17.0	2.6
CAFFMDCA2	-17.2	2.5
CAFFMDCA3	-16.9	2.4
CAFFMDCB1	-17.7	2.2
CAFFMDCB2	-18.0	2.4
CAFFMDCB3	-17.9	2.2
CAFFMDCC1	-17.8	2.3
CAFFMDCC2	-17.9	2.3
CAFFMDCC3	-17.9	2.4
CAFFMDFA1	-26.8	
CAFFMDFA2	-26.7	
CAFFMDFA3	-26.6	

CAFFMDFB1	-27.3	
CAFFMDFB2	-27.6	
CAFFMDFB3	-27.2	
CAFFMDFC1	-27.2	
CAFFMDFC2	-27.6	
CAFFMDFC3	-26.8	
CAFFWEBA1	-19.5	6.3
CAFFWEBA2	-20.0	6.6
CAFFWEBA3	-19.5	6.3
CAFFWEBB1	-14.7	5.8
CAFFWEBB2	-14.4	5.7
CAFFWEBB3	-14.8	5.7
CAFFWEBC1	-15.9	6.1
CAFFWEBC2	-15.6	5.9
CAFFWEBC3	-15.3	5.9
CAFFWECA1	-17.2	2.5
CAFFWECA2	-17.6	2.4
CAFFWECA3	-17.3	2.3
CAFFWECB1	-18.1	2.2
CAFFWECB2	-16.9	2.2
CAFFWECB3	-17.0	2.5
CAFFWECC1	-17.2	2.1
CAFFWECC2	-16.9	2.3
CAFFWECC3	-17.1	2.4
CAFFWEFA1	-25.9	
CAFFWEFA2	-25.8	
CAFFWEFA3	-26.0	
CAFFWEFB1	-25.8	
CAFFWEFB2	-26.5	
CAFFWEFB3	-25.8	
CAFFWEFC1	-24.6	
CAFFWEFC2	-25.7	
CAFFWEFC3	-25.1	
DEFFBKBA1	-18.7	5.7
DEFFBKBA2	-18.9	5.6
DEFFBKBA3	-19.0	5.7
DEFFBKBB1	-25.4	6.3
DEFFBKBB2	-25.5	6.4
DEFFBKBB3	-25.4	6.3
DEFFBKBC1	-24.8	6.3
DEFFBKBC2	-24.0	6.2
DEFFBKBC3	-25.0	6.4
DEFFBKCA1	-17.4	2.2
DEFFBKCA2	-16.6	2.7
DEFFBKCA3	-16.8	2.8
DEFFBKCB1	-17.0	2.4
DEFFBKCB2	-17.0	2.8
DEFFBKCB3	-18.1	2.4
DEFFBKCC1	-17.7	2.5
DEFFBKCC2	-18.1	2.5
DEFFBKCC3	-17.1	2.7
DEFFBKFA1	-27.4	

DEFFBKFA2	-27.4	
DEFFBKFA3	-27.6	
DEFFBKFB1	-28.0	
DEFFBKFB2	-27.5	
DEFFBKFB3	-27.9	
DEFFBKFC1	-27.9	
DEFFBKFC2	-27.5	
DEFFBKFC3	-27.7	
DEFFMDBA1	-17.4	6.1
DEFFMDBA2	-17.4	5.9
DEFFMDBA3	-17.2	6.0
DEFFMDBB1	-17.9	5.8
DEFFMDBB2	-18.0	5.8
DEFFMDBB3	-18.0	5.9
DEFFMDBC1	-18.8	5.7
DEFFMDBC2	-18.5	5.9
DEFFMDBC3	-18.6	5.5
DEFFMDCA1	-17.0	2.7
DEFFMDCA2	-17.1	2.8
DEFFMDCA3	-18.1	2.6
DEFFMDCB1	-17.7	2.3
DEFFMDCB2	-17.8	2.3
DEFFMDCB3	-17.2	2.5
DEFFMDCC1	-17.2	2.4
DEFFMDCC2	-18.1	2.1
DEFFMDCC3	-17.7	2.1
DEFFMDFA1	-26.1	
DEFFMDFA2	-26.8	
DEFFMDFA3	-26.1	
DEFFMDFB1	-27.0	
DEFFMDFB2	-26.5	
DEFFMDFB3	-27.3	
DEFFMDFC1	-27.5	
DEFFMDFC2	-27.1	
DEFFMDFC3	-26.6	
DEFFWEBA1	-13.8	5.9
DEFFWEBA2	-14.0	6.0
DEFFWEBA3	-14.1	5.7
DEFFWEBB1	-14.3	5.8
DEFFWEBB2	-14.6	5.7
DEFFWEBB3	-14.3	5.7
DEFFWEBC1	-14.4	5.8
DEFFWEBC2	-14.3	5.9
DEFFWEBC3	-14.3	5.9
DEFFWECA1	-17.0	2.1
DEFFWECA2	-17.3	2.0
DEFFWECA3	-16.9	2.4
DEFFWECB1	-18.1	2.1
DEFFWECB2	-17.0	2.4
DEFFWECB3	-17.1	2.4
DEFFWECC1	-17.0	2.2
DEFFWECC2	-17.2	2.1

DEFFWECC3	-17.2	2.3
DEFFWEFA1	-24.5	
DEFFWEFA2	-24.4	
DEFFWEFA3	-24.4	
DEFFWEFB1	-25.1	
DEFFWEFB2	-24.1	
DEFFWEFB3	-23.9	
DEFFWEFC1	-24.7	
DEFFWEFC2	-25.2	
MAFFBKBA1	-17.9	7.4
MAFFBKBA2	-18.6	7.3
MAFFBKBA3	-17.9	7.4
MAFFBKBB1	-18.7	7.1
MAFFBKBB2	-18.7	6.9
MAFFBKBB3	-19.0	6.9
MAFFBKBC1	-20.0	7.2
MAFFBKBC2	-20.2	7.2
MAFFBKBC3	-20.1	7.2
MAFFBKCA1	-17.1	2.7
MAFFBKCA2	-17.4	2.5
MAFFBKCA3	-17.5	2.5
MAFFBKCB1	-16.9	2.7
MAFFBKCB2	-17.2	2.6
MAFFBKCB3	-17.3	2.6
MAFFBKCC1	-17.3	2.8
MAFFBKCC2	-17.0	2.6
MAFFBKCC3	-16.8	2.8
MAFFBKFA1	-27.9	
MAFFBKFA2	-28.4	
MAFFBKFA3	-28.2	
MAFFBKFB1	-28.4	
MAFFBKFB2	-28.4	
MAFFBKFB3	-28.8	
MAFFBKFC1	-28.1	
MAFFBKFC2	-28.1	
MAFFBKFC3	-28.5	
MAFFMDBA1	-17.9	6.3
MAFFMDBA2	-17.9	6.3
MAFFMDBA3	-18.0	6.4
MAFFMDBB1	-15.4	6.4
MAFFMDBB2	-15.1	6.3
MAFFMDBB3	-15.2	6.1
MAFFMDBC1	-15.4	6.0
MAFFMDBC2	-15.2	6.2
MAFFMDBC3	-15.4	6.2
MAFFMDCA1	-17.2	2.7
MAFFMDCA2	-17.7	1.5
MAFFMDCA3	-17.5	1.7
MAFFMDCB1	-17.2	2.5
MAFFMDCB2	-17.9	1.8
MAFFMDCB3	-18.0	1.8
MAFFMDCC1	-17.5	2.5

MAFFMDCC2	-18.5	1.7
MAFFMDCC3	-17.5	2.3
MAFFMDFA1	-27.5	
MAFFMDFA2	-27.4	
MAFFMDFA3	-27.1	
MAFFMDFB1	-27.5	
MAFFMDFB2	-27.6	
MAFFMDFB3	-27.5	
MAFFMDFC1	-27.5	
MAFFMDFC2	-27.8	
MAFFMDFC3	-27.5	
MAFFWEBA1	-15.0	6.2
MAFFWEBA2	-14.7	6.3
MAFFWEBA3	-14.6	6.1
MAFFWEBB1	-16.0	6.3
MAFFWEBB2	-13.7	6.4
MAFFWEBB3	-15.5	6.2
MAFFWEBC1	-15.1	6.5
MAFFWEBC2	-15.4	6.5
MAFFWEBC3	-15.1	6.5
MAFFWECA1	-17.4	2.5
MAFFWECA2	-17.1	2.5
MAFFWECA3	-17.4	2.4
MAFFWECB1	-17.3	2.5
MAFFWECB2	-17.0	2.5
MAFFWECB3	-17.5	2.5
MAFFWECC1	-17.0	2.4
MAFFWECC2	-16.9	2.6
MAFFWECC3	-17.5	2.4
MAFFWEFA1	-26.0	
MAFFWEFA2	-26.0	
MAFFWEFA3	-25.6	
MAFFWEFB1	-25.0	
MAFFWEFB2	-25.4	
MAFFWEFB3	-25.6	
MAFFWEFC1	-25.5	
MAFFWEFC2	-24.9	
MAFFWEFC3	-25.0	
MDFFBKBA1	-20.6	6.5
MDFFBKBA2	-20.6	6.5
MDFFBKBA3	-20.8	6.6
MDFFBKBB1	-20.7	6.1
MDFFBKBB2	-20.7	6.3
MDFFBKBB3	-20.6	6.1
MDFFBKBC1	-19.5	6.1
MDFFBKBC2	-19.8	6.1
MDFFBKBC3	-19.6	6.2
MDFFBKCA1	-17.8	2.4
MDFFBKCA2	-17.6	1.9
MDFFBKCA3	-17.5	2.5
MDFFBKCB1	-18.5	1.9
MDFFBKCB2	-19.3	2.1

MDFFBKCB3	-17.4	2.2
MDFFBKCC1	-17.4	2.4
MDFFBKCC2	-16.7	2.8
MDFFBKCC3	-17.3	2.6
MDFFBKFA1	-27.8	
MDFFBKFA2	-27.9	
MDFFBKFA3	-27.9	
MDFFBKFB1	-27.7	
MDFFBKFB2	-27.5	
MDFFBKFB3	-28.2	
MDFFBKFC1	-28.1	
MDFFBKFC2	-27.8	
MDFFBKFC3	-27.3	
MDFFMDBA1	-17.2	5.5
MDFFMDBA2	-16.9	5.3
MDFFMDBA3	-17.0	5.5
MDFFMDBB1	-16.6	6.1
MDFFMDBB2	-16.9	6.1
MDFFMDBB3	-17.0	6.2
MDFFMDBC1	-17.6	5.9
MDFFMDBC2	-17.7	5.9
MDFFMDBC3	-17.7	6.1
MDFFMDCA1	-19.1	1.9
MDFFMDCA2	-18.0	1.7
MDFFMDCA3	-18.0	1.9
MDFFMDCB1	-18.0	1.8
MDFFMDCB2	-18.0	1.9
MDFFMDCB3	-18.3	1.8
MDFFMDC1	-17.7	1.6
MDFFMDC2	-18.1	1.8
MDFFMDC3	-18.2	2.0
MDFFMDF1	-28.5	
MDFFMDF2	-27.5	
MDFFMDF3	-28.4	
MDFFMDFB1	-27.7	
MDFFMDFB2	-28.0	
MDFFMDFB3	-27.2	
MDFFMDFC1	-27.5	
MDFFMDFC2	-28.4	
MDFFMDFC3	-28.3	
MDFFW1	-14.4	5.8
MDFFW2	-14.5	5.9
MDFFW3	-16.9	5.9
MDFFWBB1	-17.0	6.1
MDFFWBB2	-16.6	6.3
MDFFWBB3	-16.9	6.2
MDFFWBC1	-17.0	6.3
MDFFWBC2	-16.9	6.1
MDFFWBC3	-17.0	6.3
MDFW1	-17.6	2.3
MDFW2	-17.6	2.2
MDFW3	-17.5	2.2

MDFFWECB1	-17.6	2.3
MDFFWECB2	-17.1	2.4
MDFFWECB3	-17.5	2.5
MDFFWECC1	-18.7	2.3
MDFFWECC2	-18.0	2.0
MDFFWECC3	-17.6	2.0
MDFFWEFA1	-26.2	
MDFFWEFA2	-26.5	
MDFFWEFA3	-26.6	
MDFFWEFB1	-26.5	
MDFFWEFB2	-25.0	
MDFFWEFB3	-25.2	
MDFFWEFC1	-27.7	
MDFFWEFC2	-27.5	
MDFFWEFC3	-27.3	
MIFFBKBA1	-18.3	5.8
MIFFBKBA2	-18.4	5.8
MIFFBKBA3	-18.2	5.8
MIFFBKBB1	-17.1	6.6
MIFFBKBB2	-17.1	6.6
MIFFBKBB3	-17.1	6.7
MIFFBKBC1	-18.4	6.0
MIFFBKBC2	-18.4	6.0
MIFFBKBC3	-18.5	6.0
MIFFBKCA1	-17.1	2.6
MIFFBKCA2	-17.1	2.7
MIFFBKCA3	-17.0	2.8
MIFFBKCB1	-17.6	2.1
MIFFBKCB2	-17.8	2.3
MIFFBKCB3	-17.5	2.3
MIFFBKCC1	-17.3	2.5
MIFFBKCC3	-17.7	2.3
MIFFBKFA1	-28.2	
MIFFBKFA2	-28.4	
MIFFBKFA3	-28.8	
MIFFBKFB1	-28.6	
MIFFBKFB2	-28.6	
MIFFBKFB3	-28.1	
MIFFBKFC1	-28.7	
MIFFBKFC2	-28.6	
MIFFBKFC3	-28.1	
MIFFMDBA1	-14.9	6.2
MIFFMDBA2	-14.9	6.3
MIFFMDBA3	-14.8	6.1
MIFFMDBB1	-17.6	5.5
MIFFMDBB2	-18.0	5.4
MIFFMDBB3	-17.9	5.5
MIFFMDBC1	-20.2	6.4
MIFFMDBC2	-20.3	6.4
MIFFMDBC3	-20.0	6.5
MIFFMDCA1	-17.5	2.1
MIFFMDCA2	-17.7	1.8

MIFFMDCA3	-17.1	2.5
MIFFMDCB1	-17.8	2.1
MIFFMDCB2	-17.5	1.7
MIFFMDCB3	-17.7	1.6
MIFFMDCC1	-17.9	2.2
MIFFMDCC2	-17.9	1.8
MIFFMDCC3	-17.8	2.0
MIFFMDFA1	-27.8	
MIFFMDFA2	-27.7	
MIFFMDFA3	-27.8	
MIFFMDFB1	-27.3	
MIFFMDFB2	-27.6	
MIFFMDFB3	-27.3	
MIFFMDFC1	-27.7	
MIFFMDFC2	-27.3	
MIFFMDFC3	-28.4	
MIFFWEBA1	-14.6	5.7
MIFFWEBA2	-14.6	5.6
MIFFWEBA3	-14.7	5.7
MIFFWEBB1	-14.6	5.8
MIFFWEBB2	-14.6	6.0
MIFFWEBB3	-14.8	6.1
MIFFWEBC1	-17.5	6.0
MIFFWEBC2	-16.9	6.0
MIFFWEBC3	-16.7	6.1
MIFFWECA1	-17.3	2.2
MIFFWECA2	-17.3	2.6
MIFFWECA3	-17.2	2.3
MIFFWECB1	-17.0	2.3
MIFFWECB2	-17.3	2.4
MIFFWECB3	-17.0	2.3
MIFFWECC1	-17.3	2.3
MIFFWECC2	-17.4	2.4
MIFFWECC3	-17.2	2.6
MIFFWEFA1	-26.5	
MIFFWEFA2	-25.4	
MIFFWEFA3	-26.5	
MIFFWEFB1	-27.0	
MIFFWEFB2	-26.6	
MIFFWEFB3	-26.7	
MIFFWEFC1	-25.0	
MIFFWEFC2	-26.1	
MIFFWEFC3	-26.2	
SFFFBKBA1	-21.5	6.6
SFFFBKBA2	-21.8	6.4
SFFFBKBA3	-21.7	6.8
SFFFBKBB1	-23.3	6.4
SFFFBKBB2	-23.6	6.5
SFFFBKBB3	-23.4	6.5
SFFFBKBC1	-22.0	6.8
SFFFBKBC2	-21.5	6.6
SFFFBKBC3	-21.9	6.4

SFFFBKCA1	-17.5	2.5
SFFFBKCA2	-17.1	2.4
SFFFBKCA3	-17.4	2.4
SFFFBKCB1	-17.1	2.3
SFFFBKCB2	-16.8	2.2
SFFFBKCB3	-16.9	2.2
SFFFBKCC1	-16.6	2.8
SFFFBKCC2	-16.7	2.8
SFFFBKCC3	-16.8	2.7
SFFFBKFA1	-27.5	
SFFFBKFA2	-27.7	
SFFFBKFA3	-27.7	
SFFFBKFB1	-27.9	
SFFFBKFB2	-27.0	
SFFFBKFB3	-28.1	
SFFFBKFC1	-27.7	
SFFFBKFC2	-27.8	
SFFFBKFC3	-27.9	
SFFFMDBA1	-21.3	6.5
SFFFMDBA2	-21.5	6.1
SFFFMDBA3	-21.7	5.8
SFFFMDBB1	-19.4	6.0
SFFFMDBB2	-19.8	5.9
SFFFMDBB3	-19.6	5.9
SFFFMDBC1	-19.9	6.1
SFFFMDBC2	-20.3	6.3
SFFFMDBC3	-19.9	5.9
SFFFMDC A1	-17.6	2.7
SFFFMDC A2	-17.6	2.7
SFFFMDC A3	-17.6	2.6
SFFFMDCB1	-17.5	2.4
SFFFMDCB2	-17.5	2.4
SFFFMDCB3	-17.3	2.4
SFFFMDC C1	-17.4	2.5
SFFFMDC C2	-17.5	2.6
SFFFMDC C3	-17.4	2.6
SFFFMDF A1	-26.4	
SFFFMDF A2	-26.6	
SFFFMDF A3	-26.5	
SFFFMDF B1	-26.3	
SFFFMDF B2	-26.7	
SFFFMDF B3	-26.6	
SFFFMDF C1	-26.4	
SFFFMDF C2	-26.8	
SFFFMDF C3	-26.7	
SFFFW EBA1	-15.0	5.8
SFFFW EBA2	-15.6	5.7
SFFFW EBA3	-14.8	5.7
SFFFW EBB1	-15.5	6.0
SFFFW EBB2	-15.6	6.0
SFFFW EBB3	-15.4	6.0
SFFFW EBC1	-15.1	5.8

SFFFWEBC2	-15.1	5.8
SFFFWEBC3	-15.2	5.8
SFFFWECA1	-17.7	2.0
SFFFWECA2	-17.7	2.0
SFFFWECA3	-17.6	1.9
SFFFWECA1	-17.0	2.2
SFFFWECA2	-16.8	2.1
SFFFWECA3	-17.0	2.3
SFFFWECC1	-17.3	2.0
SFFFWECC2	-17.2	2.0
SFFFWECC3	-17.4	2.0
SFFFWEFA1	-24.2	
SFFFWEFA2	-24.4	
SFFFWEFA3	-23.9	
SFFFWEFB1	-24.7	
SFFFWEFB2	-24.9	
SFFFWEFB3	-25.0	
SFFFWEFC1	-25.4	
SFFFWEFC2	-25.2	
SFFFWEFC3	-25.1	

* City code: CA = Los Angeles, DE = Denver, MA = Boston, MD = Baltimore, MI = Detroit, SF = San Francisco; FF designates “Fast Food”; restaurant code: WE = Wendy’s, BK = Burger King, MD = McDonald’s; food type: C = chicken, B = beef, F = fries; store location: A, B, C (*see Table 1 within main text*); serving: 1, 2, 3. Example: CAFFWECA1 (Los Angeles Fast Food from Wendy’s, chicken from store A, serving number 1).

† The amount of nitrogen in fries was less than 1% (by mass); therefore $\delta^{15}\text{N}$ value could not be reliably determined.