

Functional Nutrition for Health Occupations Labor Market Information Report

Prepared by the San Francisco Bay Center of Excellence
for Labor Market Research
June 2018

Recommendation

Based on all available data, there appears to be an undersupply of Functional Nutrition for Health workers compared to the demand for this cluster of occupations in the Bay region and in the SC-Monterey sub-region (Monterey, San Benito and Santa Cruz Counties). The annual gap is about 1,840 students annually in the Bay region and about 140 annually in the SC-Monterey sub-region. Even when the demand for Dietitians and Nutritionists are excluded from the demand calculation, because a Bachelor's degree is required, the Bay region gap is still large at about 1,630 annually. The SC-Monterey sub-region gap becomes 130 annually.

This report also provides student outcomes data on employment and earnings for programs on TOP 1306.00 - Nutrition, Foods, and Culinary Arts, TOP 1306.20 – Dietetic Services and Management, and TOP 1306.60 – Dietetic Technology in the sub-region, region and state. It is recommended that this data be reviewed to better understand how outcomes for students taking courses on these TOP codes compare to potentially similar programs at colleges in the sub-region, region and state, as well as to outcomes across all CTE programs at Cabrillo College and in the region.

Introduction

This report profiles Functional Nutrition for Health Occupations in the 12 county Bay region and in the SC-Monterey sub-region for a proposed new Skills Certificate at Cabrillo College.

- **Food Service Managers (SOC 11-9051):** Plan, direct, or coordinate activities of an organization or department that serves food and beverages.
Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 37%
- **Dietitians and Nutritionists (SOC 29-1031):** Plan and conduct food service or nutritional programs to assist in the promotion of health and control of disease. May supervise activities of a department providing quantity food services, counsel individuals, or conduct nutritional research.
Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: Internship/residency
Percentage of Community College Award Holders or Some Postsecondary Coursework: 14%
- **Dietetic Technicians (SOC 29-2051):** Assist in the provision of food service and nutritional programs, under the supervision of a dietitian. May plan and produce meals based on established guidelines, teach principles of food and nutrition, or counsel individuals.
Entry-Level Educational Requirement: Associate degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 56%

Occupational Demand

Table 1. Employment Outlook for Functional Nutrition for Health Occupations in Bay Region

Occupation	2017 Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings	Annual Openings	10% Hrly Wage	Median Hrly Wage
Food Service Managers	12,916	13,848	932	7%	7,957	1,591	\$9.81	\$18.24
Dietitians and Nutritionists	2,171	2,540	368	17%	1,072	214	\$22.56	\$36.18
Dietetic Technicians	1,141	1,254	113	10%	573	115	\$12.20	\$20.79
Total	16,228	17,641	1,413	9%	9,602	1,920	\$11.68	\$20.82

Source: EMSI 2018.2

Bay Region includes Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

Table 2a. Employment Outlook for Functional Nutrition for Health Occupations in One Hour Commute Range from Cabrillo

Occupation	2017 Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings	Annual Openings	10% Hrly Wage	Median Hrly Wage
Food Service Managers	3,775	4,046	271	7%	2,344	469	\$9.83	\$17.79
Dietitians and Nutritionists	609	712	103	17%	300	60	\$22.23	\$35.00
Dietetic Technicians	452	500	48	11%	230	46	\$11.04	\$20.20
TOTAL	4,837	5,258	421	9%	2,874	575	\$11.51	\$20.18

Source: EMSI 2018.2

One-hour commute range includes 159 zip codes within a typical one hour commute from Cabrillo College in Aptos

Table 2b. Employment Outlook for Functional Nutrition for Health Occupations in SC-Monterey Sub-Region

Occupation	2017 Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings	Annual Openings	10% Hrly Wage	Median Hrly Wage
Food Service Managers	1,035	1,090	55	5%	614	123	\$9.79	\$16.99
Dietitians and Nutritionists	150	165	15	10%	62	12	\$18.26	\$31.47
Dietetic Technicians	69	76	7	10%	34	7	\$10.34	\$18.84
TOTAL	1,254	1,331	77	6%	710	142	\$10.84	\$18.83

Source: EMSI 2018.2

SC-Monterey Sub-Region includes Monterey, San Benito and Santa Cruz Counties

Job Postings in Bay Region and SC-Monterey Sub-Region

Table 3. Number of Job Postings by Occupation for latest 12 months (May 2017 - April 2018)

Occupation	Bay Region	Four Counties*	Three Counties
Food Service Managers (11-9051.00)	5,282	1,419	275
Dietitians and Nutritionists (29-1031.00)	450	121	18
Dietetic Technicians (29-2051.00)	353	82	28
Total	6,085	1,622	321

Source: Burning Glass

*Burning Glass does not have the capability to filter job postings at the zip code level. Therefore, for the one-hour commute range, Santa Clara County was added to the three counties in the SC-Monterey sub-region to make the four counties sub-region.

Table 4. Top Job Titles for Functional Nutrition for Health Occupations for latest 12 months (May 2017 - April 2018)

Common Title	Bay	Four Counties	Three Counties	Common Title	Bay	Four Counties	Three Counties
Restaurant Manager	971	305	57	Department Manager	81	22	7
Assistant Manager	636	183	25	Banquet Manager	76	12	2
General Manager	551	138	35	Food Service Manager	74	10	0
Nutrition Assistant	303	71	26	Food and Beverage Manager	69	20	5
Restaurant General Manager	287	90	13	Director of Catering	62	9	3

Kitchen Manager	265	68	9	Manager, Food Service Industry	59	12	4
Assistant Restaurant Manager	220	71	20	Catering Manager	58	22	6
Shift Manager	206	58	29	Chef Manager	54	22	3
Manager	178	20	2	Store Manager	53	19	3
Service Manager	136	24	0	Cafe Manager	52	10	0
Dietitian	116	32	4	Food Beverage Manager	50	18	5
Dietary Aide	96	37	6	Director of Food and Beverage	39	9	0
Clinical Dietitian	93	24	3	Deli Manager	38	7	0
Registered Dietitian	93	20	2	Director of Dining Services	35	10	4

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring Functional Nutrition for Health Workers in Bay Region

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2017)	Jobs in Industry (2022)	% Change (2017-22)	% in Industry (2017)
Full-Service Restaurants (722511)	3,961	4,252	7%	24.4%
Limited-Service Restaurants (722513)	2,306	2,364	3%	14.2%
Food Service Contractors (722310)	1,519	1,547	2%	9.4%
Caterers (722320)	1,517	1,725	14%	9.3%
Snack and Nonalcoholic Beverage Bars (722515)	785	862	10%	4.8%
Mobile Food Services (722330)	629	754	20%	3.9%
General Medical and Surgical Hospitals (622110)	575	562	(2%)	3.5%
Hotels (except Casino Hotels) and Motels (721110)	454	474	4%	2.8%
HMO Medical Centers (621491)	416	589	42%	2.6%
Nursing Care Facilities (Skilled Nursing Facilities) (623110)	414	458	11%	2.6%
Corporate, Subsidiary, and Regional Managing Offices (551114)	332	332	0%	2.0%
Local Government, Excluding Education and Hospitals (903999)	238	252	6%	1.5%
Assisted Living Facilities for the Elderly (623312)	232	266	15%	1.4%
Hospitals (Local Government) (903622)	212	231	9%	1.3%
Services for the Elderly and Persons with Disabilities (624120)	205	250	22%	1.3%
Cafeterias, Grill Buffets, and Buffets (722514)	197	228	16%	1.2%
Continuing Care Retirement Communities (623311)	155	193	25%	1.0%

Source: EMSI 2018.2

Table 6. Top Employers Posting Functional Nutrition for Health Occupations in Bay and SC-Monterey (May 2017 - April 2018)

Employer	Bay	Employer	Four Counties	Employer	Three Counties
Chipotle Mexican Grill	286	McDonald's	79	McDonald's	30
McDonald's	266	Chipotle Mexican Grill	55	Monterey Peninsula Unified	17
Aramark	130	Aramark	47	Aramark	16
Panda Express	108	Compass Group	43	KFC	11
Panera Bread	91	Sodexo	35	Denny's	10
Marriott International Inc	89	Denny's	30	Destination Hotels & Resorts	9
Sodexo	88	Alum Rock Union Elementary	25	Burger King	8
Boston Market	76	P.F. Chang's	24	Carl's Jr	8
Fremont Unified School District	75	Boston Market	22	Buffalo Wild Wings	7
Pizza Hut	74	Pizza Hut	21	Landry's Restaurants	7

Bjs Restaurants Inc	72	Panda Express	20	Big Sur Lodge	6
Hilton Hotel Corporation	63	CEC Entertainment	18	Chipotle Mexican Grill	6
Jamba Juice	59	Monterey Peninsula Unified	17	North Monterey County Unified	6

Source: *Burning Glass*

Educational Supply

There are five colleges in the Bay Region issuing 77 awards annually on TOP 1306.00 - Nutrition, Foods, and Culinary Arts, TOP 1306.20 – Dietetic Services and Management and TOP 1306.60 – Dietetic Technology. There are currently no colleges in the SC-Monterey sub-region issuing awards.

Table 7. Awards on TOP 1306.00 - Nutrition, Foods, and Culinary Arts or on TOP 1306.20 – Dietetic Services and Management and TOP 1306.60 – Dietetic Technology

College	Sub-Region	CIP or TOP	Headcount	Associates	Certificates	Total
Cabrillo	SC-Monterey	130600	25	0	0	0
Canada	Mid-Peninsula	130600	195	1	0	1
Chabot	East Bay	130600	781	0	0	0
Contra Costa	East Bay	130600	69	0	0	0
De Anza	Silicon Valley	130600	1,788	0	0	0
Diablo Valley	East Bay	130600	1,470	2	0	2
Evergreen Valley	Silicon Valley	130600	392	0	0	0
Hartnell	SC-Monterey	130600	255	0	0	0
Las Positas	East Bay	130600	821	0	0	0
Los Medanos	East Bay	130600	394	0	0	0
Marin	North Bay	130600	100	0	0	0
Merritt	East Bay	130620	38	0	19	19
		130660	367	8	1	9
Mission	Silicon Valley	130600	398	0	0	0
Monterey	SC-Monterey	130600	446	0	0	0
Napa Valley	North Bay	130600	14	0	0	0
San Francisco	Mid-Peninsula	130600	323	0	22	22
San Mateo	Mid-Peninsula	130600	406	0	0	0
San Jose City	Silicon Valley	130600	180	0	0	0
Santa Rosa	North Bay	130600	1,512	0	0	0
		130620	54	1	14	15
		130660	0	10	0	10
Skyline	Mid-Peninsula	130600	100	0	0	0
Solano	North Bay	130600	1,110	0	0	0
West Valley	Silicon Valley	130600	351	0	0	0
Total Bay Region			11,103	22	55	77
Total SC-Monterey Sub-Region			726	0	0	0

Source: *IPEDS, Data Mart and Launchboard*

NOTE: Headcount of students who took one or more courses is for 2016-17, and the totals for the region and sub-region is only for TOP 130600 (to avoid duplication). The annual average for awards is 2014-17 unless there are only awards in 2016-17. The annual average for other postsecondary is for 2013-16.

Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 1,920 annual openings for the Functional Nutrition for Health occupational cluster and 77 annual awards for an annual undersupply of 1,843. In the SC-Monterey sub-region, there is also a gap with 142 annual openings and no annual awards. Even when the demand for Dietitians and Nutritionists are excluded from the demand calculation, because a Bachelor's degree is required, the Bay region undersupply is still large at 1,629 annually. The SC-Monterey sub-region undersupply becomes 130 annually.

Student Outcomes

Table 8a. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1306.00 - Nutrition, Foods, and Culinary Arts

2015-16	Bay (All CTE Programs)	Cabrillo (All CTE Programs)	State (130600)	Bay (130600)	SC-Monterey (130600)	Top College on 130600 in the region	
% Employed Four Quarters After Exit	74%	70%	66%	70%	62%	Mission	81% (46 students)
Median Earnings Two Quarters After Exit	\$10,310	\$8,390	\$6,030	\$8,880	\$6,835	San Francisco	\$9,765
Median % Change in Earnings	46%	54%	55%	37%	45%	San Francisco	83% (27 students)
% of Students Earning a Living Wage	63%	55%	41%	46%	22%	San Francisco	59% (17 students)

Source: Launchboard Pipeline (version available on 5/30/18)

Table 8b. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1306.20 – Dietetic Services and Management

2015-16	Bay (All CTE Programs)	Cabrillo (All CTE Programs)	State (130620)	Bay (130620)	Top College on 130620 in the region	
% Employed Four Quarters After Exit	74%	70%	72%	74%	Merritt	82% (14 students)
Median Earnings Two Quarters After Exit	\$10,310	\$8,390	\$9,125	\$10,395	Merritt	\$11,665
Median % Change in Earnings	46%	54%	51%	26%	Merritt	35% (12 students)
% of Students Earning a Living Wage	63%	55%	51%	62%	Merritt	64% (9 students)

Source: Launchboard Pipeline (version available on 5/30/18)

Table 8c. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1306.60 – Dietetic Technology

2015-16	Bay (All CTE Programs)	Cabrillo (All CTE Programs)	State (130660)	Bay (130660)	Top College on 130660 in the region	
% Employed Four Quarters After Exit	74%	70%	68%	71%	Merritt	71% (54 students)
Median Earnings Two Quarters After Exit	\$10,310	\$8,390	\$6,285	\$9,780	Merritt	\$10,590
Median % Change in Earnings	46%	54%	64%	18%	Merritt	27% (52 students)
% of Students Earning a Living Wage	63%	55%	46%	52%	Santa Rosa	64% (7 students)

Source: Launchboard Pipeline (version available on 5/30/18)

Skills, Certificates and Education

Table 9. Top Skills for Functional Nutrition for Health Occupations in Bay Region (May 2017 - April 2018)

Skill	Postings	Skill	Postings	Skill	Postings
Restaurant Management	2,281	Performance Analysis	338	Inventory Control	150
Scheduling	1,374	Lifting Ability	335	Administrative Functions	145
Budgeting	1,230	Customer Contact	323	Event Planning	143
Food Safety	1,160	Purchasing	323	Store Management	142
Cost Control	1,122	Dietetics	316	Operations Management	136
Guest Services	1,071	Point of Sale System	316	Merchandising	135
Teamwork/Collaboration	864	Performance Appraisals	307	Store Operations	130
Customer Service	786	Basic Mathematics	272	Occupational Health & Safety	129
Staff Management	660	Food Service Industry Knowledge	234	Office Administration	127
Quality Management	603	Nutrition Services	227	Sales Goals	122
Food Service Experience	585	Performance Management	226	Food Safety and Quality	120
Retail Industry Knowledge	521	Team Management	222	Customer Checkout	114
Cleaning	409	Conflict Management	218	Office Supply Ordering	114
Restaurant Operations	398	Inventory Management	199	Service Improvement	114
Cash Handling	391	Quality Assurance and Control	183	Business Administration	113
Food Preparation	383	Accounting	174	Patient Care	112
Cooking	371	Employee Training	174	Product Sales	112
Sales	363	Hospitality Industry Knowledge	171	Retail Management	111
Restaurant Experience	348	Teaching	169	Training Programs	111
Supervisory Skills	344	Profit Targets	164	Inventory Maintenance	110
Repair	342	Business Acumen	161	Financial Reporting	106

Source: Burning Glass

Table 10. Certifications for Functional Nutrition for Health Occupations in the Bay Region (May 2017 - April 2018)

Note: 78% of records have been excluded because they do not include a certification. As a result, the chart below may not be representative of the full sample.

Certification	Postings	Certification	Postings
ServSafe	509	Food Service Certification	70
Driver's License	428	Certified Dietary Manager	54
Registered Dietitian	325	First Aid Cpr Aed	50
Food Handler Certification	148	Certified Diabetes Educator (CDE)	27

Source: Burning Glass

Table 11. Education Requirements for Functional Nutrition for Health Occupations in Bay Region

Note: 57% of records have been excluded because they do not include a degree level. As a result, the chart below may not be representative of the full sample.

Education (minimum advertised)	Latest 12 Mos. Postings
High school or vocational training	1,522 (58%)
Associate Degree	213 (9%)
Bachelor's Degree or Higher	854 (33%)

Source: Burning Glass

Methodology

Occupations for this report were identified by use of skills listed in O*Net descriptions and job descriptions in Burning Glass. Labor demand data is sourced from Economic Modeling Specialists International (EMSI) occupation data and Burning Glass job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CTE Launchboard and CCCCCO Data Mart.

Sources

O*Net Online

Labor Insight/Jobs (Burning Glass)

Economic Modeling Specialists International (EMSI)

CTE LaunchBoard www.calpassplus.org/Launchboard/

Statewide CTE Outcomes Survey

Employment Development Department Unemployment Insurance Dataset

Living Insight Center for Community Economic Development

Chancellor's Office MIS system

Contacts

For more information, please contact:

- Karen Beltramo, Data Research Analyst, for Bay Area Community College Consortium (BACCC) and Centers of Excellence (CoE), karen@bacc.net or (831) 332-1253
- John Carrese, Director, San Francisco Bay Center of Excellence for Labor Market Research, jcarrese@ccsf.edu or (415) 452-5529