


Promoting Nutrition through Public Health in Los Angeles County


California Dietetic Association
Annual Meeting
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Objectives

- Describe Public Health nutrition and the PH approach to nutrition issues in communities.
- Showcase examples of PH nutrition chronic disease interventions
- Share how you can connect and support the efforts of your local PH department



What is Public Health Nutrition?

Table 1 Definitions that have been suggested for public health nutrition from the literature

Authors (country of origin)	Definition
Hughes and Somerset ¹ (Australia)	Public health nutrition is the art and science of promoting population health status via sustainable improvements in the food and nutrition system . Based upon public health principles , it is a set of comprehensive and collaborative activities, ecological in perspective and intersectoral in scope, including environmental, educational, economic, technical and legislative measures.
Rogers and Schlossman ² (USA)	The term 'public nutrition' has been defined as a new field encompassing the range of factors known to influence nutrition in populations , including diet and health, social, cultural and behavioral factors; and the economic and political context. Like public health, public nutrition would focus on problem solving in a real-world setting, making its definition an applied field of study whose success is measured in terms of effectiveness in improving nutrition situations.
Nutrition Society (Landman et al. ³) (UK)	Public health nutrition focuses on the promotion of good health through nutrition and the primary prevention of diet-related illness in the population . The emphasis is on the maintenance of well-being in the whole population.
Yngve et al. ⁴ (EU)	Public health nutrition focuses on the promotion of good health through nutrition and physical activity and in the prevention of related illness in the population .
Johnson et al. ⁵ (USA)	Public health nutrition practice includes an array of services and activities to ensure conditions in which people can achieve and maintain nutritional health, including surveillance and monitoring nutrition-related health status and risk factors, community or population-based assessment, programme planning and evaluation, leadership in community/population interventions that collaborate across disciplines, programmes and agencies, and leadership in addressing the access and quality issues around direct nutrition services to populations.
Strategic Intergovernmental Nutrition Alliance ⁶ (Australia)	Public health nutrition focuses on issues affecting the whole population rather than the specific dietary needs of individuals. The impact of food production, distribution and consumption on the nutritional status and health of particular population groups is taken into account, together with the knowledge, skills, attitudes and behaviours in the broader community.

Public Health Nutrition


- Strives to improve or maintain optimum nutritional health of the whole population with a focus on high risk or vulnerable subgroups within the population.
- Emphasizes health promotion and disease prevention but may include therapeutic and rehabilitative services when these needs are not adequately addressed by other parts of the health care system.



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Public Health Nutrition (cont.)

- Uses multiple, coordinated strategies to reach and influence the community, including education as well as policy, system, and environmental change.
- Requires organized and integrated efforts with leadership provided by the local health department/agency.




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Core Responsibilities of PH

- Assessment
 - Systematic assessment of nutrition-related needs of the population, identifying priority areas, and monitoring nutrition status of the population and at-risk groups
- Policy Development
 - Developing policies, programs, and standards that address highest priority nutrition problems and needs



Core Responsibilities (cont.)

- Assurance
 - Implementing effective nutrition strategies by encouraging or enabling other entities, requiring action through regulation or providing services directly

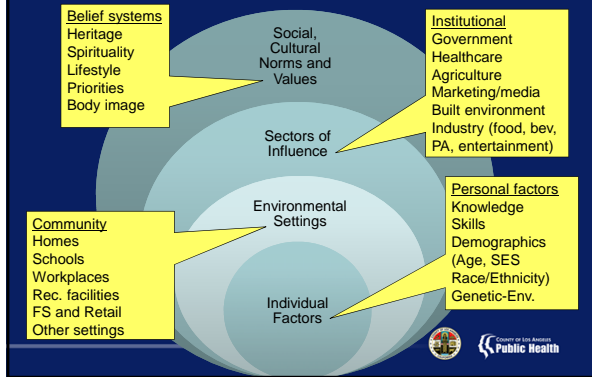


Three levels of prevention

- Primary
 - Prevention; reducing or removing risk factors by environmental or community change
- Secondary
 - Strategies to stop or slow down disease progression by targeting at-risk groups
- Tertiary
 - Managing and rehabilitating individuals with diagnosed health conditions to improve quality of life



Social-Ecological Model



Why is PH Nutrition relevant?

- Vulnerable subgroups are at high risk
 - Elderly, low-income, pregnant women, children
- Behavior change is challenging
- Dietary factors are associated leading causes of death



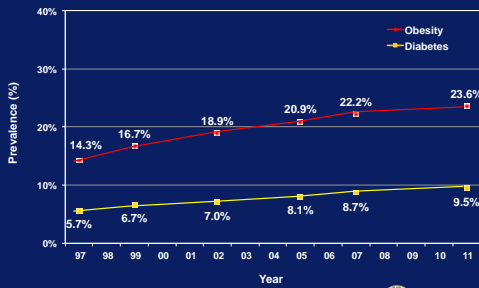
10 Leading Causes of Death in LA County, 2010

Death	Premature Death
1. CHD	1. CHD
2. Stroke	2. Homicide
3. Lung ca	3. Suicide
4. COPD	4. MV crash
5. Alzheimer's	5. Liver dz
6. Pneumonia	6. Drug OD
7. Diabetes	7. Lung ca
8. Colorectal ca	8. Stroke
9. Liver dz	9. Breast ca
10. Breast ca	10. Diabetes

LACDPH, Mortality in Los Angeles County, 2010



Prevalence of Obesity and Diabetes Among Adults in Los Angeles County, 1997-2011

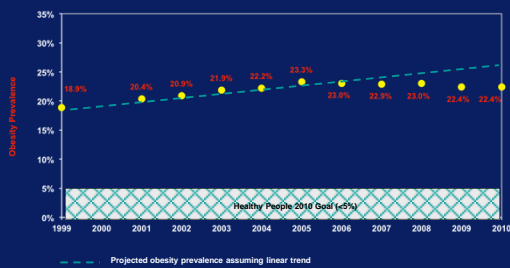


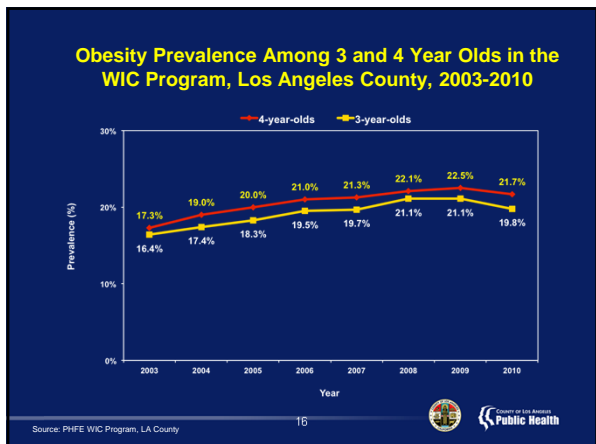
LACHS, LACDPH

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Prevalence of Obesity Among 5th, 7th, and 9th Graders in Los Angeles County Public Schools, California Physical Fitness Testing, 1999-2010





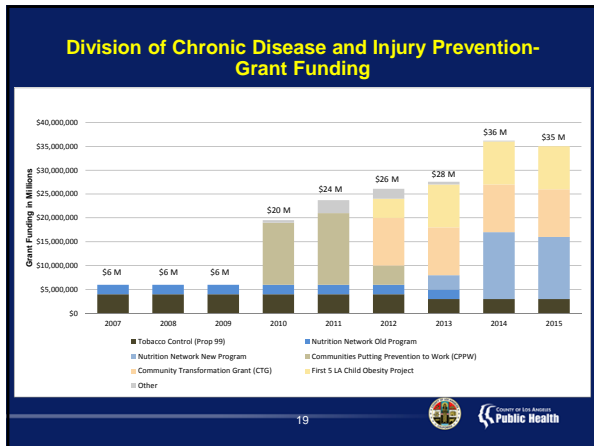
Cities/Communities in LA County with Lowest and Highest Childhood Obesity Rates, 2007

Top 10*			Bottom 10*		
City/Community Name	Obesity Prevalence (%)	Rank of Economic Hardship (1 - 127)	City/Community Name	Obesity Prevalence (%)	Rank of Economic Hardship (1 - 127)
Manhattan Beach	3.4	1	Walnut Park	38.7	119
Calabasas	5.0	2	South El Monte	34.5	118
Hermosa Beach	5.1	3	Hawaiian Gardens	33.4	117
Agoura Hills	5.3	4	East Los Angeles	32.9	116
Beverly Hills	5.4	5	Vincent	32.2	115
Malibu	5.9	6	West Carson	31.4	114
Palos Verdes Estates	7.3	7	Commerce	31.3	112
San Marino	7.8	8	Alondra Park	31.3	112
Rolling Hills Estates	8.4	9	West Whittier- Los Nietos	31.1	111
La Canada Flintridge	8.5	10	Florence-Graham	31.0	110
Average for 10 lowest	6.2%		Average for 10 highest	32.8%	

Source: Obesity and Related Mortality in Los Angeles County: A Cities and Communities Health Report, 2011.

Division of Chronic Disease and Injury Prevention

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Nutrition Education/Obesity Prevention

- \$42 Million, 4-Year CDPH, USDA-Funded SNAP-Ed
- Purpose: to provide comprehensive local nutrition education and obesity prevention programs to qualifying low-income populations in Los Angeles

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NEOP Strategies

- Conduct neighborhood assessments of the food environment
- Engage local leaders and community members to increase access to and consumption of healthy foods and beverages
- Implement a County Nutrition Action Plan (CNAP) to improve nutrition education, social marketing and food access across the county

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NEOP Strategies (continued)

- Provide evidence-based nutrition education and physical activity integration
- Improve access to healthy foods and opportunities for physical activity at worksites, retail, child care centers, schools, and faith based organizations
- Evaluate interventions through formative, process, and impact/outcome evaluation

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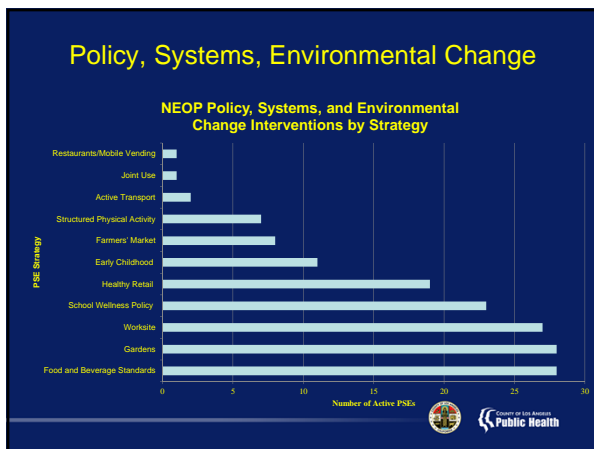


Join the movement!  CaChampionsForChange 

Angela's story: https://www.youtube.com/watch?v=Osw_4pi2bic

Maria's story: <https://www.youtube.com/watch?v=Ofohlswq05g>

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Early Childhood Obesity Prevention Initiative (ECOPI) Choose Health LA Kids

- \$41 million, 4-Year Initiative Funded by First 5 LA
 - Aligns with First 5 LA's Strategic Plan Goal: Children maintain a healthy weight
 - Builds and expands on previous investments
 - Leverages existing obesity prevention efforts
- Goal: To implement an intensive community-based public education and skills-building project to promote physical activity and healthy eating to the nearly one million children aged 0-to-5 and their families in LA County.



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CHLA Kids Target Populations

- Countywide, but focused on communities with...
 - Largest population of children ages 0-5
 - Highest prevalence of childhood obesity
 - High economic disadvantage



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CHLA Kids Objectives

- Nutrition & Physical Activity Education
- Food Marketing & Policy Change
- Grocery Stores
- Media and Social Marketing
- Clinical Settings
- Restaurant Program



Choose Health LA Restaurants

- Offers customers smaller portion size options of their favorite meals, in addition to the existing menu items
- Offers healthier kids meals that include fruits and vegetables, healthy beverages, and non-fried foods
- Offers customers chilled water, free of charge



Healthy Food Procurement

- **Food Procurement** encompasses the process of procuring, distributing, selling, and/or serving food.
 - Nutrition Standards
 - Food Purchasing Standards
 - Environmental Approaches

Source: Robles B, Wood M, Kimmons J, Kuo T. Comparison of nutrition standards and other recommended procurement practices for improving institutional food offerings in Los Angeles County, 2010-2012. *Adv Nutr* 2013; 4(2): 191-202.



Creating Healthier Food Environments

- Increase access to healthy food and beverage options.
- Improve the quality of food
- Leverage the purchasing power of large institutions.
- Support local economies.
- Improve the health of employees, and community members who use government programs and facilities.




DPH Healthy Food Procurement Initiative

2009: Needs assessment conducted to explore the facilitators and barriers of a proposed food procurement policy to reduce sodium.

PREVENTING CHRONIC DISEASE
PUBLIC HEALTH RESEARCH, PRACTICE, AND POLICY


Facilitators of and Barriers to
Implementing a Local Policy to Reduce
Sodium Consumption in the County of Los
Angeles Government, California, 2009



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*Made possible with funding from the Centers for Disease Control and Prevention through the Los Angeles County Department of Public Health

Types of Food Venues, 2009

- Jails, juvenile detention centers, probation camps
- Worksite cafeterias, concession stands, and snack shops
- Distributive food programs (e.g., senior, children's meals)
- Mobile vending
- Vending machines





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Baseline Estimated Reach Needs Assessment Results, 2009

Setting/Program	# of meals served per day
Worksite Cafeterias (e.g., Public Works, Hall of Administration, Health Services Headquarters)	1,820
Mobile Trucks	2,500
Snack Shops	1,000
Jails	80,000
Probation camps	11,050
Hospitals	3,589

County of Los Angeles Government ~ 37 million meals per year


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*Estimates based on needs assessment findings, 2009.

DPH Healthy Food Procurement Initiative

2010: DPH launched its initiative to create healthier food environments in the County of Los Angeles with support from the CDC through *Communities Putting Prevention to Work* and *Sodium Reduction in Communities Program* funding.



*Made possible with funding from the Centers for Disease Control and Prevention through the Los Angeles County Department of Public Health

DPH Healthy Food Procurement Initiative

2011: Board motion requires Departments to consult with DPH prior to the release of any request for proposal (RFP) for County food services contracts.



*Made possible with funding from the Centers for Disease Control and Prevention through the Los Angeles County Department of Public Health

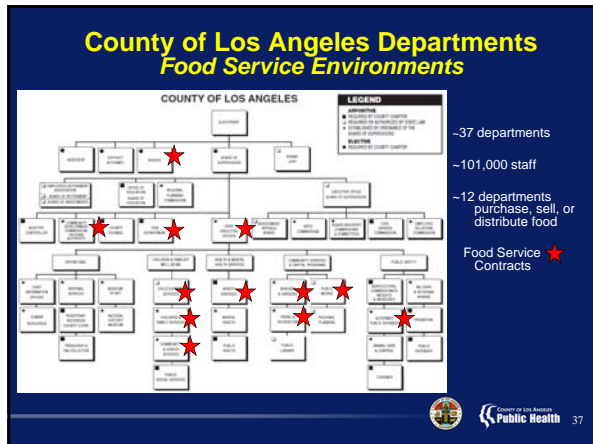
DPH Healthy Food Procurement Initiative

2011-12: Organizational food environment and capacity assessment conducted to support implementation of the County Board motion.

Executive assignment from PH Director for all departments – who sells food?



*Made possible with funding from the Centers for Disease Control and Prevention through the Los Angeles County Department of Public Health



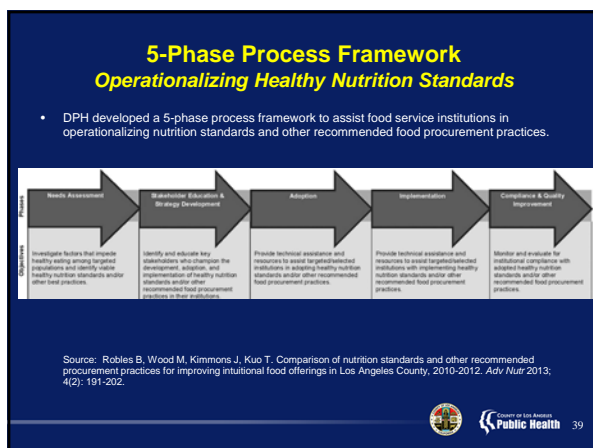
DPH Healthy Food Procurement Initiative

2011-2015*: DPH partners with 7 (of 12) County Departments to operationalize nutrition standards:

- Chief Executive Office
- Department of Beaches and Harbors
- Department of Health Services
- Department of Parks and Recreation
- Department of Public Works
- Probation Department (kids)
- Department of Children and Family Services

Now working with private institutions as well.

County of Los Angeles
 Public Health 38



Key Elements to Implementation

- Venue-specific nutrition standards and promo. Strategies
- DPH-led environmental scan of selected food setting (s)
- One-on-one meetings and technical support (e.g., menu review and nutrition technical advice)
- Implementation guides, trainings, and promotional signage
- On-going monitoring and compliance
- Annual Food Policy Forum



Sample Food Service Requirements Worksite Cafeteria

- At least 50% of entrées, side options, and snacks/desserts to meet healthy nutrition standards.
- At least three fresh fruit options per meal service, served without added sweeteners.
- At least two non-starchy vegetable items per meal service, prepared without fat or oil.
- No menu items shall be deep fried.
- Reduced portion size for sugar sweetened beverages.
- Gradual sodium reduction plan.
- Purchase locally grown food.
- Product placement & promotional strategies.




Product Placement & Promotion Strategies



- Display healthy food and beverage options within five feet of all checkout registers.
- Display only water, diet drinks, 100% fruit juice or low-fat dairy products in eye-level sections of all beverage cases.
- Move salad bars closer to the checkout registers or at point-of-purchase.




Evaluation

Purpose

- Evaluate potential effectiveness of expanding access to healthy food options for County staff, clients, and community members.

Activities

- Examine compliance with nutrition standards.
- Review inventory of food sold or consumed at facilities.
- Gauge patron acceptability of new menu changes.
- Document barriers and facilitators to implementation.




Evaluation Tools and Data Sources

Tools

- Validated Nutrition Environment Measures Survey for Vending Machines (NEMS-V) tool
- Environmental scan tool for cafeterias
- Vendor and consumer surveys
- Self-assessment tool for County departments

Data Sources

- Nutritional analysis
- Food production records
- Sales records




Compliance with Vending Machine Nutrition Policy

- Department of Chief Executive Office: 300+ snack and beverage machines at 170+ locations
- Compliance summary reports developed including lessons learned
 - On-going technical support & training is critical

Department of Chief Executive Office (CEO): Compliance Results*

Pre-Implementation	Post-Implementation
<ul style="list-style-type: none"> • 27% healthy snacks • 57% healthy beverages 	<ul style="list-style-type: none"> • 70% healthy snacks • 82% healthy beverages

*Note: These results are not representative of all machines in the County and only reflect a sample of 43 snack and beverage machines at 17 locations.



Compliance with Vending Machine Nutrition Policy

300+ machines across 170+ locations

	Adherence to Policy		Average Sodium per packaged product			
	Baseline (old vendor)	Follow-up (new vendor)	NEMS-V (old vendor)	Sales Records (transition period)	NEMS-V (new vendor)	Product List Data (new vendor)
Snacks	27% healthy snacks	70% healthy snacks	294 mg per package	203 mg per package	205 mg per package	126 mg per package
Beverages	57% healthy beverages	82% healthy beverages	N/A	53 mg per beverage	75 mg per beverage	N/A

Average 57% reduction of sodium in snacks

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Lessons Learned

Facilitators to Success	Challenges to Implementation
<ul style="list-style-type: none"> Build upon what came before and on lessons from successful nutrition and/or policy, systems, and environmental change interventions. Assess institutional readiness to operationalize new approaches. Establish strong partnerships with key stakeholders. Build on national momentum and support (e.g., CDC, GSA/HHS). Provide technical assistance to support ongoing implementation. 	<ul style="list-style-type: none"> Differences among department's internal administrative processes, contracts divisions, and unique needs and concerns. Variance among department's interest level and understanding of nutrition concepts. Concerns about cost, availability and acceptability of healthier food options. Issues with County budgets and contracting processes. Challenges with data collection efforts for evaluation.

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Resources


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Getting involved

- Join our listserv: lacollab
- Join other listservs and PH oriented groups
- Talk, write, or visit your local legislators
- Email me:

stbaldwin@ph.lacounty.gov

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Resources

Michelle Wood, MPP
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Salt Shocker Videos
<http://www.youtube.com/user/ChooseHealthLA>

Procurement Resources:
<http://publichealth.lacounty.gov/chronic/>

UNC Center for Training and Research Translation
Healthy Food Procurement in the County of Los Angeles
<http://www.centrtrt.org/?p=intervention&id=1184>

Public Education Resources:
www.choosehealthia.com/


Special thanks to:
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Michael Leighs, MPP
Brenda Robles, MPH
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Thank you!

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