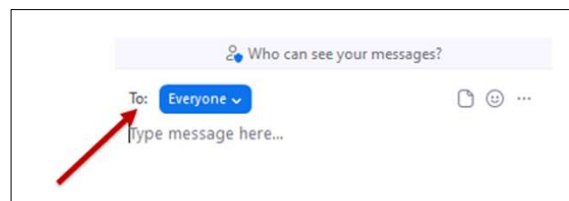


# Welcome!



- Lines have been muted.
- If you have questions or comments, use the chat feature and post to EVERYONE.
- To enable closed captioning, select **Show Captions** icon **CC** from the meeting controls toolbar.



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# Using Chats During ACEND Town Hall



ACEND encourages attendees to use the chat feature to ask questions and express their opinions respectfully



At any point, ACEND reserves the right to remove an attendee from the Town Hall for inappropriate or harassing comments

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# Webinar Recording and Slides



Accreditation Council  
for Education in  
Nutrition and Dietetics  
the accrediting agency for the  
Academy of Nutrition  
and Dietetics



This webinar is being recorded



The slides and recording will be shared on the ACEND DEI webpage

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Academy of Nutrition  
and Dietetics

# ACEND Announcements and Updates

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## Crosswalk of the ACEND Standards and CDRs Registration Examination Study Outlines

### • Registration Examination for Dietitians

- 2022 Standards for DPD, CP, and DI programs and FEM GP Standards
- Completed and posted on ACEND website

### • Registration Examination for Dietetic Technicians

- 2022 Standards for DT programs
- Currently in development and will be posted on ACEND website spring 2025

CDR RDN Exam Domain 1 – Principles of Dietetics (21%)		
CDR RDN Exam TOPIC A – Food, Nutrition and Supporting Sciences		
CDR RDN Exam Topics	ACEND FEM (RE 3.2, Competencies, and *Ps) *Ps are provided in the Appendix	ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs)
Food science	<ul style="list-style-type: none"> <li>1.4: Applies principles of microbiology and food science as it pertains to food and nutrition product development and when making modifications to food. (Ps: 1.4.1-1.4.3)</li> <li>3.3: Applies principles of food safety and sanitation to the storage, production and service of food. (Ps: 3.3.2-3.3.4)</li> <li>Additional potential Ps: 1.10.3, 1.12.4, 3.4.1</li> </ul>	<ul style="list-style-type: none"> <li>RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations.</li> <li>RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan.</li> <li>KRDN 4.5 Apply safety and sanitation principles related to food, personnel and customers.</li> </ul>
2. Composition of food	<ul style="list-style-type: none"> <li>1.4: Integrates knowledge of chemistry and food science as it pertains to food and nutrition product development and when making modifications to food. (Ps: 1.4.1-1.4.3)</li> </ul>	<ul style="list-style-type: none"> <li>RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations.</li> </ul>

Crosswalk located under Program Directors page on the ACEND website

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## Training Resources Available for Standard 4

- Training Available for Program Directors on the Standard 4 Competency Assessment Table (CAT)/Knowledge Assessment Table (KAT)
- Recording located under Standards, Fees, and Policies on the ACEND Website

Home > ACEND > Standards, Fees and Policies > 2022 Standards and Templates

### 2022 Standards and Templates

The Accreditation Council for Education in Nutrition and Dietetics 2022 Accreditation Standards for Nutrition and Dietetics Coordinated Programs (CP), Didactic Programs (DPD), Internship Programs (DI), Technician Programs (DT) and Foreign (FDE) Programs, resources and templates are provided below. International Institutions seeking ACEND accreditation for programs leading to graduates' eligibility to take the Commission on Dietetic Registration's credentialing exam for dietitian nutritionists will follow the CP standards.

Students of ACEND-Accredited programs cannot achieve competencies without being trained in in-patient, acute-care settings such as hospitals, long-term care facilities, and renal dialysis centers.

New programs applying for candidacy must first submit an [eligibility application](#).

#### 2022 Accreditation Standards Webinar and Trainings

- [Presentation Recording](#) (external link)
- [Presentation Slides](#) (.pdf)
- [Presentation Questions and Answers](#) (.pdf)
- [Standard 4-Student Learning Assessment Recording](#) (external link)

2022 ACEND Accreditation Standards

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**Accreditation Council  
for Education in  
Nutrition and Dietetics**  
the accrediting agency for the  
Academy of Nutrition  
and Dietetics

**Disability Insight for Accredited  
Dietetics Programs**

Suzanne (“Suzy”) Domel Baxter, PhD, RD, LD, FADA, FAND  
Alena Morales, RDN


Disabilities MIG

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**Suzanne Domel Baxter, PhD, RD, LD, FADA, FAND**

- Suzy has worked in a residential school for children with disabilities, outpatient clinic for adults, school food service, public health, and nutrition research.
- She co-founded the Disabilities in Nutrition and Dietetics Member Interest Group, served as its inaugural chair, and is now serving as its past chair.



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## Alena Morales, RDN

- Alena works in clinical nutrition.
- Her expertise concerns the relationship between nutrition and disability as a sociocultural identity in healthcare, education, research, and advocacy.
- She created one of the first disability cultural centers in the nation along with new organizations and wellness programs for college students with disabilities.



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## Disclosures

### Speakers on disabilities for groups in person & virtually

- Abbott Nutrition Health Institute podcast series
- California Association for Postsecondary Education and Disability
- National Center for College Students with Disabilities
- FNCE®, Affiliates, DPGs, MIGs
- Nutrition Educators of Health Professionals DPG Symposium
- Nutrition Diversity Conference (Metro State University Denver-POHA)
- Society for Nutrition Education and Behavior, Public Health Division
- Disability Visibility Podcast

### Books

### Research

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## Overview of Webinar

- Both speakers are RD/RDNs with disabilities.
- They will define disability, share disability statistics, and present three case studies on disability with faculty/student scenarios to demonstrate why disability culture is crucial for accredited dietetics programs and internships.
- The three case studies will concern physical access, social access, and technological access.

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## Learning Objectives

- 1) Define disability and provide one statistic of disability prevalence in the U.S.
- 2) Explain one take-away point for each of the three disability case studies — physical access, social access, and technological access — presented during the webinar.
- 3) Describe two advantages of disability-inclusive accredited dietetics programs.

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## ADA Definition of Disability (Part 1)

A **person with a disability** is someone who:

- has a physical or mental impairment that **substantially limits** one or more **major life activities**,
- has a history or record of such an impairment (e.g., cancer), or
- is perceived by others as having such an impairment (e.g., person with scars from a severe burn).
- Next two slides will define “substantially limits” and “major life activities.”

Source: [Introduction to the Americans with Disabilities Act | ADA.gov](#)

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## ADA Definition of Disability (Part 2)

“**Substantially limits**” definition:

- Interpreted broadly and not meant to be a demanding standard.
- Not every condition meets this standard.
- An example of a condition that is not substantially limiting is a mild allergy to pollen.

Source: [Introduction to the Americans with Disabilities Act | ADA.gov](#)

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## ADA Definition of Disability (Part 3)

“Major life activities” definition:

Activities done daily, including body’s own internal processes such as:

- Actions (e.g., eating, sleeping, speaking, breathing)
- Movements (e.g., walking, standing, lifting, bending)
- Cognitive functions (e.g., thinking, concentrating)
- Sensory functions (e.g., seeing, hearing)
- Tasks (e.g., working, reading, learning, communicating)
- Operation of major bodily functions (e.g., circulation, reproduction, individual organs).

Source: [Introduction to the Americans with Disabilities Act | ADA.gov](#)

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## Disability is also...

- someone who experiences ableism or discrimination based on the way their body looks and/or operates
- someone who requires accommodations to optimize their mobility, senses, and abilities to navigate the environment
- someone who experiences access barriers
- a demographic
- an intersectional identity
- culture

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## Disability Status Varies Widely

29% of US adults self-reported that they have a disability.

Disabilities vary widely; ADA regulations do not list all of them.  
Some are visible, and some are not.

One person can have multiple types of disabilities.

Disabilities impact people of all races, ethnicities, and genders.  
Disability intersects with other identities and cultures.

Source: [NICHM Data Visualization](#)

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## Disability Statistics

In September 2023, the National Institutes of Health designated people with disabilities as a population with health disparities.

This designation aims to advance research to build evidence concerning the needs of people with disabilities, the barriers they face, and effective interventions.

Defining disability as a demographic opens the doors for additional research, knowledge, and inclusivity of disability.

Source: [NIH designates people with disabilities as a population with health disparities](#)

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## Disability Statistics: Health Concerns

- Disability itself is not synonymous with poor health, yet 38% of people with disabilities self-report having fair or poor health compared to 8% of people without a disability.
- People with disabilities experience higher rates of the following co-occurring health conditions than people without disabilities:
  - depression (44% versus 14%)
  - stroke (7% versus 2%)
  - chronic obstructive pulmonary disease (13% versus 3%), and
  - diabetes (17% versus 8%)
  - Chronic conditions often co-occur and can lead to disability

Source: [NICHM Data Visualization](#)

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## Disability Statistics: Academia

- In the past decade, the prevalence of students reporting a disability while in college has nearly doubled to 21% as of 2020.
- In 2023, the six-year graduation rate of students with disabilities at 4-year colleges was 49.5% compared to 68% of non-disabled students.
- A 2023 report by the US Government Accountability Office found that data collection surrounding disability in academia is not as comprehensive when compared to other marginalized groups.

Sources: [US Government Accountability Office](#)  
[US Department of Education](#)

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## Intersectionality of Disabilities with Demographics

- Understanding the intersectionality of disabilities with demographics promotes equity and inclusivity and helps to address specific needs of disabled people.
- Key aspects of the intersectionality of disabilities with demographics:
  - Race and Ethnicity
  - Gender and Sexual Orientation
  - SES
  - Age
  - Geography

Source: [NICHM Data Visualization](#)

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## Core Competencies on Disability for Health Care Education

- 113 disability stakeholders from across the nation participated
- Process began in August 2016 and ended in April 2018
- After two waves of feedback, 6 competencies, 49 sub-competencies, and 10 principles and values emerged
- Key milestone in preparing a disability competent health care workforce

Source 1: Havercamp SM, Barnhart WR, Robinson AC, Whalen Smith CN. What should we teach about disability? National consensus on disability competencies for health care education. [Disability and Health Journal 14 \(2021\) 100989](#).

Source 2: Core Competencies and supporting material online at [go.osu.edu/corecompetenciesdisability-learnmore](http://go.osu.edu/corecompetenciesdisability-learnmore)

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## Defining Accessibility Needs

- Disability accommodations vary widely depending on an individual's access needs and wants.
- Access barriers can occur in the physical, social, organizational, or technological environment.
- Access barriers can cause or exacerbate disability.
- Addressing access barriers is only the beginning of promoting disability equity and inclusion.

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## Disability Case Study #1: Physical Access (1)

You have a new dietetics student, excited to start their academic journey. The student uses a wheelchair and has a visual disability. The first class is foodservice management with a teaching kitchen lab. Along the way, the student encounters various barriers...

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## Disability Case Study #1: Physical Access (2)

Getting to campus

- Transportation
- Navigating the campus plaza

Entering the building

- Access vs universal design:  
Historical buildings



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## Disability Case Study #1: Physical Access (3)

The classroom environment

- Quick fixes you can do
  - Create adequate access aisles
  - No backpacks, personal items on the floor
  - Movement breaks
  - Avoid rugs and floor-length tablecloths (use Scuba tablecloths)
- Requesting an accessibility tour
  - Wheelchair-accessible desk
  - Relocating classrooms
  - Minimal fluorescent lighting
  - Automatic doors
  - Wayfinding

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## Disability Case Study #1: Physical Access (4)

Navigating the teaching kitchen

- Multiple recipe formats
- Take-home assignments
- Food preparation
  - Barrier-free kitchen with accessible kitchen appliances
  - Adaptive kitchen tools and utensils
  - Teamwork



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## Disability Case Study #2: Social Access (1)

As a dietetics professor, you are familiar with your school's Letter of Accommodation (LOA) processes. One day, a student discloses to you that they are currently undergoing the interactive process to obtain an official LOA, but there is a delay. Another student informs you that they have Cerebral Palsy and sometimes take longer to speak. They have a LOA, but their needs go beyond what the Disability Resource Center can tangibly offer. You wonder how you can make the classroom environment feel more inclusive for all...

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## Disability Case Study #2: Social Access (2)

1. Resources outside of the campus Disability Resource Office
  - a) State Department of Rehabilitation
  - b) Disability culture resources
2. Access check-ins (Resources #38-40 in resource handout)
  - a) Everybody has access needs and access preferences!
  - b) Establishing language
  - c) Reducing stigma
3. Flexible teaching methods
  - a) Intersect with other methods of access

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## Disability Case Study #2: Social Access (3)

Creating an inclusive environment anticipates access needs and access wants

- Addresses nuanced needs that cannot be addressed in a Letter of Accommodation
  - Disability as an identity rather than a limitation
  - Language: person
    - » “Disabled” vs “Person with a Disability”
    - » “Person who uses a wheelchair” vs “Wheelchair user” vs “Wheelchair bound”

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## Disability Case Study #2: Social Access (4)

- Lectures/classroom discussions: Image descriptions
- Circular seating to make lip reading easier
- Allowing stim toys
- "Circle-back" moments
- Mobility device etiquette
- Frequent breaks
- Allowance of computers and phones (for reasons beyond learning)

What do these things have in common?

Source: [Department of Education](#)

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## Disability Case Study #2: Social Access (5)

1. Sponsored vocational training for people with disabilities
  1. Tuition waivers
  2. Transportation stipend
  3. Academic materials
    1. Computers
    2. Adaptive teaching kitchen tools
2. Partnerships with TRIO, Student Support Services
3. Third-party partnerships with academic programs, including dietetics
  1. Additional support during dietetic internships

Source: [Department of Education](#)

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## Disability Case Study #2: Social Access (6)

### Access Check-ins: Resources

1. *Guidelines on Access Check-ins and Alternatives for Facilitators* (#38 on resources handout)
2. *Access Needs: Centering Students and Disrupting Ableist Norms in STEM* (#39 on resources handout)
3. *Leading an Access Check-in, Teaching Tools, Virtual Access Check-in Guidelines for an Inclusive Remote Classroom* (#40 on resources handout)

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## Disability Case Study #2: Social Access (7)

### Disability Culture & Inclusion Resources

1. *Demystifying Disability: What to Know, What to Say, and How to be an Ally* (#3 on resources handout)
2. *Disability Visibility Project* (#1 on resources handout)
3. *Association on Higher Education and Disability* (#37 on resources handout)
4. *Disability Cultural Centers (DCCs)* (#17 on resources handout)
5. *Campus-specific disability stakeholders* (not on resources handout)

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## Disability Case Study #3: Technological Access (1)

You are a dietetics program coordinator who recently created a combined Master's Degree and Dietetic Internship Program at your University. As a former undergraduate DPD faculty member, you know what alternative media resources you can utilize on campus for the classroom environment, but wonder how this will translate into the internship environments, both for the students and the patients...

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## Disability Case Study #3: Technological Access (2)

- Why is this important?
- Digital accessibility impacts millions of people, regardless of ability.
- Inaccessible digital content may miss potential job applicants, internship applicants, or new students and [expose companies to legal risk](#).
- By 2050, the prevalence of people with visual disabilities is expected to double.\*

\*Source: JAMA Ophthalmol. 2016;134(7):802-809

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## Disability Case Study #3: Technological Access (3)

- Curb cuts
- Digital accessibility is for more than websites only!
- Any digital content distributed, whether internally or externally, needs to be accessible.
- Accessible digital technology supports a diverse group of users and improves experiences for people **with** disabilities (e.g., visual, auditory, physical, speech, cognitive, neurological) and **without** disabilities.



[This Photo](#) by Unknown Author is licensed under [CC BY-SA](#)

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## Disability Case Study #3: Technological Access (4)

The WebAIM Million - 2024 report on accessibility of top 1,000,000 website home pages; sixth consecutive year

- 96% of home pages had detected WCAG 2 failures
- Average of 57 errors/page (2023 analysis found 50 errors/page)
- Most common errors (same as for last 5 years): low contrast text (81% of home pages), missing alternative text for images (55%), missing form input labels (49%), empty links (45%)
- Addressing these issues would significantly improve web accessibility.

Source: [The WebAIM Million - 2024 report on accessibility of top 1,000,000 home pages](#)

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## Disability Case Study #3: Technological Access (5)

1. Digital accessibility learning modules, websites, courses
2. Alternative media
  - a) Screen reader accessible nutrition education handouts
  - b) Alternative text, image descriptions
  - c) Videos with captions
  - d) Audio descriptions of cooking demonstrations
  - e) Braille needs
3. Zoom as an accommodation
4. Tech tools
  - a) Be My Eyes

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## Disability Case Study #3: Technological Access (6)

### Resources on digital accessibility

- Web Content Accessibility Guidelines (WCAG)
- Digital Accessibility for Dietetics Webinar (free) this spring by Suzi

### Looking ahead: Disabilities MIG advocacy

- NCM now digitally accessible (*EatRight Weekly* 1-15-25) but needs something about “*Disability Culture*”
- Electronic Health Records
- Article under review on Digital Accessibility for Associations of Healthcare Practitioners
- Include disability culture in cultural competency training

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## Applications: Health Equity

- Set a positive precedent for disability cultural competency in dietetics
  - Disability culture applies to each racial/ethnic, gender, religious, etc “food culture”
- Increase diversity and inclusivity in dietetics programs
- Dietetics profession needs to collaborate with disability rights experts (professional experience, degree in disability studies)
- Resources for disability cultural competency in dietetics

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## Webinar Evaluation

- Please complete the presentation evaluation:  
<https://forms.office.com/r/d5ETbEcVaz>
- CPE certificate and handouts will be emailed to attendees within 1-2 days.



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### **Additional Resources: Handouts**

- A copy of the presentation and handouts will be sent as tagged PDFs so they are digitally accessible, along with the CPE certificate to all attendees within 1-2 days.

## 40 Relevant Disability Resources, Guidelines, Statistics, and Media

### **Disability Culture**

1. Disability Visibility Project (<https://disabilityvisibilityproject.com/>)
2. *Disability Visibility* (<https://www.penguinrandomhouse.com/books/617802/disability-visibility-by-alice-wong/>)
3. *Demystifying Disability: What to Know, What to Say, and How to be an Ally* (<https://www.penguinrandomhouse.com/books/646508/demystifying-disability-by-emily-ladau/>)
4. *Disability Friendly: How to Move from Clueless to Inclusive* ([Disability Friendly: How to Move from Clueless to Inclusive: Kemp, John D.: 9781119830092: Amazon.com: Books](#))
5. *Care Work: Dreaming Disability Justice* (<https://brownstargirl.org/care-work-dreaming-disability-justice/>)
6. *Credentialed Dietetics Practitioners with Disabilities Get the Job Done* (Link: [Amazon.com: Credentialed Dietetics Practitioners with Disabilities Get the Job Done: 9798991299312: Baxter, Suzanne Domel, Harris, Cheryl Iny: Books.](#)) All book royalties will be donated for projects of the Disabilities MIG.
7. Centers for Independent Living (<https://acl.gov/programs/aging-and-disability-networks/centers-independent-living>)
8. Sins Invalid 10 Principles of Disability Justice (<https://sinsinvalid.org/10-principles-of-disability-justice/>)
9. Understanding Disability Identity, Community, and Culture (<https://www.umassp.edu/inclusive-by-design/who-before-how/understanding-disabilities>)
10. Disability and Identity (<https://dsq-sds.org/index.php/dsq/article/view/979/1173>)
11. Disability Justice, Anti-Ableism, and Access Resources ([https://docs.google.com/document/d/1WviHvT5pLy8n\\_ZFGauOynKI8nPLU84nduPLoF6r3Exc/edit?tab=t.0](https://docs.google.com/document/d/1WviHvT5pLy8n_ZFGauOynKI8nPLU84nduPLoF6r3Exc/edit?tab=t.0))
12. Year of the Tiger: An Activist's Life (<https://www.penguinrandomhouse.com/books/688504/year-of-the-tiger-by-alice-wong/>)
13. *The Future is Disabled* (<https://arsenalpulp.com/Books/T/The-Future-Is-Disabled>)
14. *Against Technoableism: Rethinking who needs Improvement* (<https://mitpressbookstore.mit.edu/book/9781324036661>)
15. *A Disability History of the United States* (<https://www.penguinrandomhouse.com/books/219258/a-disability-history-of-the-united-states-by-kim-e-nielsen/>)
16. *Medical Apartheid* (<https://www.penguinrandomhouse.com/books/185986/medical-apartheid-by-harriet-a-washington/>)
17. List of Disability Cultural Centers (DCCs) and Symposium Recordings (<https://dcc.uic.edu/symposium/list-of-dccs/>)

### **Disability Definition, Policy, and Statistics**

18. Americans with Disabilities Act (<https://www.ada.gov/>)
19. NIHCM data visualization (<https://nihcm.org/data-visualization>)

20. UN Convention on the Rights of Persons with Disabilities (<https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-persons-disabilities>)
21. Web Content Accessibility Guidelines (<https://www.w3.org/TR/WCAG21/>)

### **Disability Equity and Accessibility in Healthcare, Dietetics, and Education**

22. Disabilities MIG (<https://www.disabilitiesmig.org/home>)
23. Abbott nutrition 5-episode podcast on disability culture and healthcare access resources (<https://podcast.ani.org/1664107/episodes/14792785-beyond-the-ramp-building-an-accessibility-culture-for-clinicians-students-with-disabilities>)
24. Children's book *When I Grow Up, I Can Be a Dietitian!* (Link: [When I Grow Up, I Can Be a Dietitian - children's book - available on Amazon.](#)) Available in paperback, Kindle eBook, and audiobook. All book royalties will be donated to help diversify the dietetics workforce.
25. Resources about vision Impairment/Blindness:
  - a. Hadley (<https://hadleyhelps.org/>)
  - b. The Blind Kitchen (<https://theblindkitchen.com/>)
  - c. Accessible Pharmacy Services (<https://accessiblepharmacy.com/>)
26. Vocational Rehabilitation Program in each state (example – <https://www.dor.ca.gov/>)
27. National Center on Health, Physical Activity, and Disability ([NCHPAD - Building Healthy, Inclusive Communities](#))
28. Health Justice Commons (<https://www.healthjusticecommons.org/>)
29. USDA SNAP online purchasing pilot (<https://www.fns.usda.gov/snap/online>)
30. USAID Feeding and Disability Resource Bank (<https://www.advancingnutrition.org/resources/disability-resource-bank>)
31. Job Accommodations Network (<https://askjan.org/>)
32. Food is Medicine Coalition (<https://fimcoalition.org/>)
33. Locating Disability Within a Health Justice Framework (<https://pmc.ncbi.nlm.nih.gov/articles/PMC10009364/>)
34. Center for Disease Control Human Development and Disability Department (<https://www.cdc.gov/ncbddd/humandevelopment/health-equity.html>)
35. Disability Justice in Healthcare: Promoting Anti-Ableism in Medical Settings (<https://ibhequity.sfsu.edu/sites/default/files/documents/Webinar%20%236%20Accessible%20PowerPoint%20Slides.pdf>)
36. American Medical Association Journal of Ethics, “Aspiring to Disability Consciousness in Health Professions Training” (<https://journalofethics.ama-assn.org/article/aspiring-disability-consciousness-health-professions-training/2024-01>)
37. Association on Higher Education and Disability (<https://www.ahead.org/home>)
  - a. [Hyperlink: Professional Resources, Membership, Research](#)

### **Access Check-ins Resources**

38. Access Check-ins for Facilitators: Reinvent the Wheel Every Time (<https://www.thecuriosityparadox.com/wheel>)
39. Access Needs: Centering Students and Disrupting Ableist Norms in STEM (<https://www.lifescied.org/doi/10.1187/cbe.21-01-0017>)



40. Leading an Access Check: What it is and How to Do It  
(<https://teachwithgive.org/resource/remote-learning-access-check/>)

# Core Competencies on Disability for Health Care Education

June 2019



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## **About this Document**

The Core Competencies on Disability for Health Care Education establish the baseline expertise required to provide quality care to patients with disabilities. The Alliance for Disability in Health Care Education partnered with Ohio Disability and Health Program at the Ohio State University Nisonger Center to establish a consensus on the core competencies through an iterative structured feedback process that included 152 people with disabilities, disability experts, health educators, and health care providers. The intent of this document is to provide broad disability standards for health care education. Following the principles of patient centered care, patients with disabilities should be included as central members of the care team as early and completely as possible. We anticipate that as these competencies are integrated into existing curricula, faculty will implement corresponding lectures, readings, and patient experiences to provide greater detail to students.

## **Competency Vision**

We envision a society where disability does not limit access to quality health care. We believe that including disability in healthcare training programs is an essential step towards achieving this vision. Our goal is to incorporate disability competencies in accreditation and licensure standards for health care providers.

## **The Alliance for Disability in Health Care Education**

The Alliance for Disability in Health Care Education, Inc., (the Alliance) is a not-for-profit organization of health care educators representing medicine, nursing, and other disciplines who are working to integrate disability-related content and experiences into health care education and training programs. The Alliance for Disability in Health Care Education identified the need for a consensus around the skills and competencies essential to providing quality interprofessional health care to patients with disabilities. The Alliance then developed a core set of disability competencies to facilitate the integration of disability content into health care education and training programs.

## **Ohio Disability and Health Program**

The Ohio Disability and Health Program is one of 23 State Disability and Health Programs funded by the Centers for Disease Control and Prevention to improve the health and quality of life for people with disabilities through adaptation and implementation of evidence-based strategies in their communities.

## Preface

Health education programs strive to prepare future health professionals to deliver safe, high-quality, accessible, person-centered care that improves population health outcomes and reduces the cost of health care. Although overall health care quality is improving in the United States, health care disparities persist, reflecting a lower quality of health care and worse health outcomes for socially disadvantaged groups. Evidence suggests that bias, prejudice, and stereotypes on the part of healthcare providers contribute to differences in care. Health care training programs have responded by prioritizing the reduction of health disparities in their training. We now see meaningful curricula on cultural competency, health disparities, and patient-centered care and efforts to create a diverse health care workforce. These programs will prepare the next generation of health care providers to meet the needs of a culturally, racially, and socioeconomically diverse patient population. People with disabilities represent one socially disadvantaged population that has been overlooked in these efforts. Americans with disabilities still experience barriers to routine clinical and preventive services and public health and wellness initiatives. Inadequate knowledge and limited skills in diagnosing, treating, and providing ongoing care to people with disabilities play a role in perpetuating health care inequalities for this population. The Core Competencies on Disability for Health Care Education defines standards for disability training to improve health care for people with disabilities.

Many health care professionals underestimate the capabilities, health, and quality of life experienced by people with disabilities. They may hold erroneous assumptions about the current and future functional status of people with disabilities. Because health care professionals provide information about the functional status of patients that often determines their eligibility for essential social and health benefits, these erroneous assumptions can have a detrimental effect on access to services for people with disabilities. This type of judgment can also influence the health care professionals' view of the quality of life for people with disabilities, and therefore their proclivity to promote healthy behaviors and their approach to end-of-life issues and palliative care. These Core Competencies on Disability present standards on social, environmental, and physical aspects of disability that will inform future health professionals on how to provide effective, interprofessional team-based health care to patients with disabilities across the lifespan.

The importance of interprofessional collaborative practice has been recognized and embraced by the WHO, federal agencies (CDC, Dept. of Education, NIH, MCHB/LEND, Dept. of Veteran's Affairs, National Academies of Practice, AUCD), managed care organizations, and a broad range of professional associations. Adopting interprofessional collaborative practice competencies in health education programs will prepare students to work effectively as part of an interprofessional team and improve care. In addition to being interprofessional, the competencies are cross-disability, applicable to the care of patients with any type and severity of disability.

## Guiding Principles and Values

**Rationale:** As a demographic group, people with disabilities are likely to be very-well represented in primary and specialty healthcare settings. The World Health Organization defines disability as an umbrella term covering impairments, activity limitations, and participation restrictions. An impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations. People may experience one or more disabilities that impact physical, mental and/or behavioral health. High quality healthcare for people with disabilities depends, in part, on the values held by healthcare providers. These guiding principles and shared values, deemed essential to providing quality care to people with disabilities, establish the basis of these core competencies on disability.

1. Culturally and linguistically competent care for patients with disabilities means recognizing that patients have diverse backgrounds and are influenced by multiple social, economic, and cultural factors, all of which should be included in a comprehensive view of a patient's health status and treatment.
2. People with disabilities should have equitable access to appropriate, accessible, and high-quality health care.
3. People with disabilities face barriers in accessing effective health care that may or may not be associated with their disabilities.
4. Training should be provided to all health care providers so that they are able to provide high-quality care to patients with disabilities.
5. Healthcare providers can maximize the quality of life of their patients with disabilities by preventing and treating health conditions.
6. People with disabilities are typically knowledgeable of their condition, and this expertise should be respected and used to improve healthcare decisions and care.
7. Quality of life and treatment goals should incorporate and reflect the patient's point of view.
8. Healthcare providers should communicate directly and respectfully with patients with disabilities, including them in the decision-making process.
9. Healthcare providers should know under what circumstances caregivers should be included in healthcare encounter and decision-making.
10. Provide the optimal patient experience by creating a respectful, accessible, and welcoming office environment using universal design principles. Accessible diagnostic/screening equipment and techniques are essential to quality health care for patients with disabilities.

## Competency 1: Contextual and Conceptual Frameworks on Disability

**Rationale:** Disability can be considered in multiple contexts beyond the medical cause and its implications, and these contexts may be relevant to patients with disabilities. Learners should recognize multiple conceptual frameworks of disability and understand that disability exists within a socio-historical context.

**Acquire a conceptual framework of disability in the context of human diversity, the lifespan, wellness, injury and social and cultural environments.**

- 1.1 Define disability as a functional limitation and identify disability prevalence. Discuss the diversity and range of disabilities in terms of disability types (e.g. mobility, sensory, cognitive, and behavioral).
- 1.2 Describe the conceptual and contextual framework of disability.
- 1.3 Compare and contrast the Medical, Social, and World Health Organization International Classification of Functioning models and recognize their application to health care of people with disabilities. Compare and contrast disability and disease.
- 1.4 Describe the civil rights and independent living history of people with disabilities and their access to services. Understand how such history has both informed current thinking and improved access to care and equal rights for people with disabilities.
- 1.5 Describe how social determinants of health directly impact people with disabilities (e.g., discrimination, employment, education, transportation, housing, poverty, access to healthcare).
- 1.6 Describe disability as an aspect of diversity/cultural identity and contrast this with historical views of disability as merely a negative health outcome.

## Competency 2: Professionalism and Patient-Centered Care

**Rationale:** Adherence to principles of professionalism, communication, and respect during interactions with people with disabilities, as well as building an understanding of the patient's perspective, is essential for effective health care for patients with disabilities.

**Demonstrate mastery of general principles of professionalism, communication, respect for patients, and recognizes optimal health and quality of life from the patient's perspective.**

- 2.1 Explore and mitigate one's own implicit biases and avoid making assumptions about a person's abilities or lack of abilities and lifestyle.
- 2.2 Treat all patients, regardless of disability and functional status, with respect and humility.
- 2.3 Demonstrate communication strategies to best meet the needs/abilities of the patient. Seek out and implement appropriate resources, including interpreter services, to communicate effectively using clear language at an appropriate level of health literacy. Adjust schedule to allow extra time as needed.
- 2.4 Demonstrate patient-centered care in terms of building a trusting partnership between patient and health care providers.
- 2.5 Discuss issues of trust, confidence, and confidentiality with patients who receive support with personal care during health care encounters related to their disability.
- 2.6 Recognize that some patients with disabilities may benefit from supported decision-making. Demonstrate skill in engaging the patient and caregivers in the supported decision-making process.
- 2.7 People with disabilities have many cultural identities including race, ethnicity, primary language, sexual orientation, gender identity, geographic residence (urban versus rural), and values and beliefs about health, well-being, and function. Describe healthcare practices that demonstrate sensitivity and respect for diverse cultural backgrounds.
- 2.8 Consider and discuss social determinants of health (including socioeconomic factors, cultural background, finances, insurance coverage, availability/access to personal support systems) in clinical decision making and the provision of care.
- 2.9 Understand that people with disabilities may consider their devices and equipment to be an extension of their person. Consult patients before interacting with such equipment (e.g., wheelchair, assistive communication device, crutches, service animal, etc.).



## Competency 3: Legal Obligations and Responsibilities for Caring for Patients with Disabilities

**Rationale:** Federal laws are in place to protect the civil rights of patients with disabilities and prevent discrimination in health care settings. Health care professionals must meet the physical, communication, and programmatic access requirements of the Americans with Disabilities Act, Rehabilitation Act, Civil Rights Act of 1964, and related laws and policies by using the best practices associated with universal design.

**Understand and identify legal requirements for providing health care in a manner that is, at minimum, consistent with federal laws such as the Americans with Disabilities Act (ADA), Rehabilitation Act, and Social Security Act to meet the individual needs of people with disabilities.**

- 3.1 Describe the concept and application of universal design in a health care system, including costs and benefits.
- 3.2 Identify the physical access requirements (e.g., accessible exam table, mammography equipment, etc.) of the ADA, Rehabilitation Act, and related laws and policies that apply to health and the provision of health care.
- 3.3 Plan for accessible communication in all aspects of the healthcare encounter including scheduling, intake, responding to and asking questions, and follow-up care. Avoid technical jargon.
- 3.4 Provide documents in alternate formats to be accessible for patients with disabilities (e.g. large print, Braille, audio versioning, accessible color text).
- 3.5 Discuss strategies for meeting access requirements (e.g., needed accommodations) of the ADA, Rehabilitation Act, and related laws and policies.
- 3.6 Ensure that healthcare providers and support staff members are trained to provide services that meet the needs of the patient with a disability (e.g., knowing how to appropriately transfer a patient with a mobility limitation to an exam table).
- 3.7 Providers recognize their own need for further training and/or skill development in caring for patients with disabilities and take action to address those needs based on current best practices.
- 3.8 Recognize issues related to legal guardianship (e.g., consent to treatment, HIPAA, privacy) in the health care system.

## Competency 4: Teams and Systems-based Practice

**Rationale:** The input of professionals from multiple disciplines is often required to address the complex health needs of patients with disabilities in various health and community support systems.

**Engage and collaborate with team members within and outside their own discipline to provide high-quality, interprofessional team-based health care to people with disabilities.**

- 4.1 Describe various models of team approaches when supporting people with disabilities in health care systems (e.g., interdisciplinary, multidisciplinary, inter-professional).
- 4.2 Describe impact of teams and the unique and the discipline-specific responsibilities of team members in addressing health needs of patients with disabilities and in partnering with the patient as a central member of the team.
- 4.3 Describe challenges in creating a person-centered or family-centered system of care. Identify services and providers that could play a role in the health of the patient. Discuss strategies to build an effective healthcare team.
- 4.4 Demonstrate skills in teamwork including flexibility, adaptability, open communication, assertiveness, conflict management, referral, use of evidence-based practice to support decision-making and mutual goal-setting with patients with disabilities and other team members.
- 4.5 List systems of community-based services and supports that may be useful for patients with disabilities outside of the clinical care system. Be prepared to consider cultural factors and interact with these systems and make relevant referrals to ensure comprehensive care coordination, particularly during times of transition.

## Competency 5: Clinical Assessment

**Rationale:** Good clinical management requires that accurate and relevant information about the health and function of patients with disabilities is viewed in the context of the person’s life activities, goals, and interests. It is essential to consider a patient’s disability as well as their language, race, ethnicity, sexual orientation, gender, gender identity and expression, health literacy and other cultural factors in clinical assessment.

**Collect and interpret relevant information about the health and function of patients with disabilities to engage patients in creating a plan of care that includes essential and optimal services and supports.**

- 5.1 Understand that the patient with disabilities should be the primary source of information regarding their care.
- 5.2 Discuss situations where the caregiver(s) can be helpful to inform or enhance assessments and interventions and the importance of securing patient permission before engaging caregivers.
- 5.3 Integrate information on functional status of people with disabilities, including both functional strengths and limitations, in clinical decision making.
- 5.4 The capacity to respond competently to a patient’s language, race, ethnicity, sexual orientation, gender, gender identify and expression, health literacy, and other cultural factors is essential to clinical assessment. Demonstrate awareness of the impact of intersecting marginalized social identities, such as race, ethnicity, and disability, in the context of healthcare.
- 5.5 Apply strategies or supports that could be used in a healthcare setting to accommodate patients with functional limitations (mobility, sensory, cognitive, behavioral) associated with disabilities.
- 5.6 Recognize that people with disabilities experience the same common health conditions as people without disabilities, and that a disability may impact the presenting signs and symptoms.
- 5.7 Identify health issues that are often associated with primary disability diagnoses (e.g., congenital heart defect, urinary tract infections in patients with spinal cord injuries, etc.).
- 5.8 Describe the nature and etiology of different types of disabilities and determine if they are static, progressive, or variable in course.
- 5.9 When applicable to the scope of practice of the learner’s profession, demonstrate skill in performing a history and physical exam (PE), modifying it as needed to provide equally effective care while accommodating for mobility, sensory, cognitive, and/or behavioral issues.
- 5.10 Recognize that mental health conditions can be the primary disabling condition. People with disabilities are also at increased risk for co-occurring mental health conditions. Recognize the risk of misdiagnosing mental health concerns in patients with disabilities.

5.11 Assess the social environment of patients with disabilities to understand the impact of significant relationships and social networks on health outcomes.

5.12 Recognize that children and adults with disabilities are vulnerable to abuse. The nature of abuse may be verbal, financial, physical and/or sexual. Abuse often goes unreported because the person with a disability may depend on the abuser for activities of daily living or social support.

5.13 Assess the physical environment of people with disabilities, recognizing that the patient's socioeconomic status is a determinant of his/her functioning and independence and also affects health and safety.

## Competency 6: Clinical Care over the Lifespan and during Transitions

**Rationale:** Patients with disabilities may require supports and accommodations to benefit fully from clinical intervention. Transitions across the lifespan may be similar yet differ in terms of opportunities, needed supports, or services for people with disabilities. Providers should be sensitive to supports needed across the lifespan of patients with disabilities with consideration given to unique and/or specific challenges that patients with disabilities may face, especially during transitional periods. Particularly relevant transitions in the life of people with disabilities include transitioning from preschool or early intervention to kindergarten, graduating from high school, transitioning from the pediatric to adult care system, moving from parents' home, marriage, birth of a child, changing job, home, or housemate, coping with the death of parent, retirement, health in aging, and end of life. Health care providers must plan adequate time to address related care issues during the clinical visit.

**Knowledgeable about effective strategies to engage patients with disabilities in creating a coordinated plan of care with needed services and supports.**

- 6.1 Demonstrate sensitivity and support for the health care needs of the patients with disabilities across the lifespan and during transitions.
- 6.2 Integrate assessment information from individuals with disabilities, multiple disciplines, and ancillary informants in order to develop a collaborative health care plan that includes health promotion strategies and preventative care.
- 6.3 Recognize that people with disabilities need access to age-appropriate preventative screenings, assessments, and health education including reproductive health, family planning, and sexuality.
- 6.4 Tailor recommended supports and interventions to the patient's cultural beliefs and values, time, resources, and preferences. Be prepared to propose constructive solutions to possible conflicts between patient, caregivers, and other professionals about goals and treatments.
- 6.5 Demonstrate skill in identifying, coordinating, referring, and advocating for access to community and health care resources needed to support treatment plan objectives.
- 6.6 Identify policy, practice, and systems changes essential to providing optimal health supports and services for people with disabilities.
- 6.7 Recognize the role of interprofessional healthcare providers in encouraging healthy behaviors (e.g., weight management, exercise, diet, smoking cessation, etc.) to promote the health and function of patients with disabilities.
- 6.8 Recognize that disability should not limit self-determination in end-of-life care for people with disabilities, regardless of disability type and severity. Offer treatment options in the same way options would be presented to similar-aged peers without disabilities.

The Alliance for Disability in Health Care Education is made up of interprofessional health educators committed to improving health care for people with disabilities. The Alliance recognized the need for disability standards in health care education and drafted core disability competencies. The Alliance then partnered with Ohio Disability and Health Program at the Ohio State University Nisonger Center to establish a national consensus on these core competencies. Ohio Disability and Health Program enlisted people with disabilities and health professionals to form the Core Competencies Development Committee. National consensus on the core competencies was achieved through an iterative Delphi process.

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## Adapted Kitchen Tools & Utensils

By Suzanne Domel Baxter, PhD, RD, LD, FADA, FAND

Adapted kitchen tools and utensils make food preparation easier for people with mobility limitations, vision loss, blindness, or unsteady hands. The items can be purchased from Amazon, The Blind Kitchen, supermarkets, or other stores.



**Dry measure cups with tactile (raised) dots on handles (\$30)** of each to indicate measure with 0 dots for one cup, 2 dots for half cup, 3 dots for one third cup, and 4 dots for quarter cup.

**Dry measure spoons with tactile (raised) dots on handles (\$30)** of each to indicate measure with 0 dots for tablespoon, 1 dot for full teaspoon, 3 dots for half teaspoon, and 4 dots for quarter teaspoon



**White and black cutting board (\$17).** Use white side when cutting non-white foods. Use black side when cutting white foods like onions or potatoes.

**Cutting boards with handle and non-slip feet (\$25).** Handle helps when transferring cut items from board into bowl, pot, etc. Non-slip feet keep board in place when cutting.



**Pronged cutting boards (\$70)** include little prongs that hold food in place while one cuts.

A **rocker knife (\$12)** is a large knife that rocks back and forth while cutting instead of sawing food. It may reduce the risk of cutting oneself during food preparation because the knife does not need to be picked up between cuts.





## Adapted Kitchen Tools & Utensils (page 2)



**Cut glove** (\$7) protects against painful cuts from kitchen work. Cut-resistant material allows for lots of dexterity, making it ideal for cutting, slicing, peeling, etc. Made of food-grade material of certified protection.

The **Palm Peeler** (\$6) makes peeling vegetables safer and is a more accurate tool for peeling vegetables than the traditional peeler with a handle. The Palm Peeler keeps your fingers safely behind where the blade meets the food.



**Finger guards** keep your fingers safe while slicing. They have an open-loop design that fit most fingers. They are suitable for left- or right-hand use.

**Kitchen scissors** easily cut through food, meat, vegetables, poultry, fish, herbs, seafood, and more.



**Slicing guide** (\$12) helps you cut even slices to ensure even cooking. A plastic handle and 12 stainless steel prongs securely hold food to allow you to cut a variety of widths of slices.

The **Shark** (\$6) safely removes undesirable parts of food from larger pieces. Use the Shark to cut the tops and stems out of tomatoes and strawberries or remove bad portions from a potato without using a paring knife. The Shark is safer and will not cut your skin.



**Double spatula** (\$12) keeps a firm grip on your food as you turn it. This utensil allows for one-handed control while cooking food and keeps food secure while lifting and flipping.

**Magic Bullet** (\$39) is a countertop blender helpful for people with limited dexterity, hand strength, or those who tire easily and need a device for quick and easy chopping or mixing. The pulse feature gives foods a rough chop; lock it in to puree and finely blend.



## Adapted Kitchen Tools & Utensils (page 3)



**Oven rack guards** (\$10) are made of heat-resistant silicone and protect skin from severe burns that occur when you accidentally touch the hot oven rack. The bright color allows people with some residual vision to better see the level of the oven racks.

**Non-skid mixing bowl** with handle covered with textured silicone (\$15) allows you to insert fingers into handle while thumb and hand conform to side of bowl for a secure grip. Nonskid material covers the bottom on the bowl to prevent tipping or sliding.



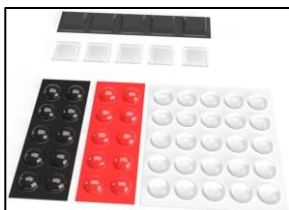
**Under cabinet openers** (\$30) are used to open jars, bottles, or cans. They can be manual or automatic, and can consist of grippers, corkscrews, and other mounted openers. Mounted openers are typically nailed to wall or hard surface and are often used by people with one hand.

**Food choppers** (\$40) are an easy way to cut food without using a knife. They can help people who have weak or shaky hands.



**Oven pulls** (\$10) are used to safely pull or push hot oven or toaster racks. Heat resistant silicone oven pulls can withstand up to 530° F.

**Manual food processors** (\$37) allow for safe chopping, mincing, or pureeing. With a simple twist, a person can chop fruits, vegetables, nuts and more with 3 sharp, stainless-steel blades.



**Bump dots** (\$19) also called locator dots, tactile dots, or touch dots) are an inexpensive way to label containers, appliances, computer keyboards, phone keypads, oven keypads, etc. for blind and sighted people. Use clear dots to avoid obscuring view of keypads. For people with low vision, use black dots on a white background (and vice versa) or fluorescent orange dots on patterned or darker backgrounds.

## **Meal Preparation from a Wheelchair**

By Suzanne Domel Baxter, PhD, RD, LD, FADA, FAND

Preparing meals from a wheelchair is possible when kitchens have barrier-free design and wheelchair-accessible kitchen appliances.

### **Barrier-Free Design**

Barrier-free design is a perspective applied throughout the design process with the goal of removing barriers that would prevent people from living safely, beautifully, and comfortably in their homes. Barrier-free design takes guidelines from the Americans with Disabilities Act and Universal Design practices and combines them with the customized needs of families. Barrier-free design has elements to consider for doorways, kitchens, bathrooms, and furniture.

Barrier-free design elements to consider for doorways:

- 36"+ exterior doors
- 30" - 36" interior doors
- 42"+ wide hallways
- Barn doors
- Curb-less entry points
- Electronic door openers
- Lever door handles
- Pocket doors
- Ramps
- Smart home alarm systems
- T-Pull door closer

Barrier-free design elements to consider for kitchens.

- 32" - 36" countertops
- 4 foot turning radius
- Appliance garage
- Cabinet pulls - no knobs
- Drawer refrigerator/freezer
- Drawer microwave
- Drawer storage
- Electric can opener
- Induction stove
- Extended toe kick - 10"+
- Pop up outlet
- Pull out cutting boards
- Roll under prep area, roll under kitchen sink, and roll under kitchen stove
- Smart home appliances
- Voice command faucet and voice command lighting
- Wall oven with swing door (from left to right or vice versa)

Blue Copper Design was born from the struggle people with disabilities face in finding accessible homes. For information about barrier-free design for bathrooms and furniture, search the website for Blue Copper Design at <https://bluecopper.design/>.

## Wheelchair-Accessible Kitchen Appliances

Preparing meals from a wheelchair is possible with a wide selection of appliances that comply with the Americans with Disabilities Act. This is a trending segment of the home improvement market due to increases in multigenerational households, residents aging in place, barrier-free design, and inclusive design to provide independence for residents with disabilities.

The Americans with Disabilities Act (ADA) of 1990 was enacted to prohibit discrimination against individuals with disabilities in all areas of public life. Public spaces like schools and hotels were the first spaces with ADA-compliant appliances. However, ADA-compliant appliances are also available for residential use. Most residential kitchens have 36" tall counters whereas ADA-compliant kitchens have 34" tall countertops which make it easier to prepare and cook meals from a seated position. Here are some suggestions for accessible kitchen appliances.

- **French Door Refrigerators:** In terms of accessibility, the French door design has a freezer drawer on the bottom which makes it possible to use the freezer from a seated position without reaching. Also, the crisper bins are in the middle of the fridge which makes it easier to reach fruits and vegetables from a seated position.
- **Refrigerator drawers:** Refrigerator drawers are especially ADA-friendly because they open from the top, which allows access from a seated position without leaning over.
- **Induction Cooktops:** Induction cooking technology is amazingly fast to heat food, easy to control the temperature, and is the safest cooking surface. The surface never gets as hot as with gas or radiant electric cooktops, so it's much easier to keep the glass surface looking new.
- **Bluetooth Range Hoods:** Limiting reach is a key factor in accessible kitchen design. Ventilation hoods are typically mounted 30 to 36 inches above counter height. That makes it impossible to control most range hoods from a seated position. A few vent hoods are remote-control compatible or can be connected to a wall switch. More recently, smart appliances can sense cooking activity and automatically turn on the vent hood using Bluetooth technology. Alternatively, one can connect their range hood to a smart home manager like Amazon Alexa or Google Home to operate it using their voice!
- **French Door Wall Ovens and Side-swing Ovens:** Wall ovens are an excellent choice for barrier-free and accessible kitchen design and aging in place because ovens can be installed at any height that is most convenient to use from a seated position. French door wall ovens are an excellent choice because it is easier to get dishes in and out of the oven without having to lift heavy trays and pans over an oven door. Side-swing ovens provide similar access but have a single door that swings to the side to open.
- **Built-in Microwaves and Microwave Drawers:** Built-in microwaves can be installed at any height which is great for barrier-free and accessible kitchen designs. Microwave drawers load from the top, which allows one to load or unload the microwave from a seated position cookware without bending over.
- **Dishwashers:** Accessible dishwashers are just like regular dishwashers except they are designed to fit under a 34-inch-tall countertop. There is a wide variety of ADA-compliant dishwashers including full size, apartment size, and dishwasher drawers. Full console dishwashers have controls on the front, so it is easy to see the amount of time that remains in the cycle. Bar

handle dishwashers are popular because it's easier to pull the dishwasher open from a seated position.

- **Trashcans:** Avoid trashcans that are opening with a foot pedal.