Aged care job dictionary

**Commercial Kitchen Staff**

**How to use this job dictionary**

This **generic resource** contains an analysis of **regular tasks** for a **priority role** in the **aged care sector.** It is designed to be useful for a range of purposes such as:

* informing about the tasks, duration, demands of the role
* highlighting the risk and location of a musculoskeletal injury
* demonstrate good practice to prevent injury
* a preventative tool for use with pre-employment assessments

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**Task pages**

* Kitchen cleaning tasks
* Bench work
* Material handling in cool room, freezer, cold larder
* Use of dishwasher
* Food distribution
* Food preparation
* Manoeuvring trolleys
* Use of kitchen equipment

**Additional information**

* Risk of musculoskeletal injury
* Lift / push/ pull physical demands categories
* Frequency of task – table
* Reducing the risk of injury and re-injury – hierarchy of controls and suggestions
* Glossary of terms and abbreviations
* Relevant legislation

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| SWP_logo | | **Role** | | **Commercial kitchen staff resident care facility** | |
| **Task** | | **Cleaning Tasks** | |
| * Cleaning occurs in the kitchen area as meals and food is being prepared and then after meal service and at the end of the day. * Common cleaning tasks include mopping and cleaning floors. * Some kitchens may be hosed down and a squeegee used to remove excess water. * Benches, walls and food preparation areas are cleaned throughout the day. * Cooking equipment is cleaned after meals have been prepared and served. This can include ovens, stoves and Bain Marie. | | | | | |
| IMG_5552 | IMG_5522 | |  | |  |
| Cleaning equipment is stored in various locations. Some bending or squatting may be required to access some equipment. | A mop and bucket may need to be filled with water and cleaning solution. | | Reaching across benches to clean walls or bench tops may be required. | | Some mops may be squeezed using a hand lever. Others may be squeezed out with a foot pedal operation. |
| IMG_5570 |  | | DSC_0424 | |  |
| A ‘figure 8’ method is used when mopping large areas. The worker moves the mop from side to side when mopping. | Cleaning of ovens, cooktops and cooking equipment occurs after the meal service. Some reaching is required. | | After cleaning bins are emptied and liners replaced. The size and type of bins will vary. Lift up to 10kg when raising the liner. | | Garage bags are often placed into industrial bins. The force to open lids can vary with lifting up to 15kg for some bins. |

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| **Critical physical demands** | | | | | | | |
| **Physical Demand** | | **N** | **O** | **F** | **C** | **Description** | |  |  | | --- | --- | | **Critical range of motion** | Shoulder to 140 degree degrees flexion. | | **Lift capacity** | Up to 15kg bin lids. Garbage bags up to 10kg. | | **Push / Pull force** | Repetitive force when mopping and wiping surfaces. | | **Shift duration / Roster** | Variable shift times and durations for kitchen workers. | | **Environmental factors** | Indoors working in a commercial kitchen with cleaning equipment. | | **Task rotation** | Cleaning duration varies depending on size of the kitchen. | | **Breaks** | Various depending on shift duration. | | **PPE** | Closed-in shoes, gum boots may be worn at times and gloves as needed. | |
| **Sitting** | | ✓ |  |  |  |  |
| **Standing** | |  |  |  | ✓ | Various surfaces can be wet at times |
| **Walking** | |  |  | ✓ |  | Short distances inside the kitchen |
| **Climbing** | | ✓ |  |  |  |  |
| **Stooping** | | ✓ |  |  |  |  |
| **Bending** | |  | ✓ |  |  | Cleaning low surfaces |
| **Kneeling** | | ✓ |  |  |  |  |
| **Squatting** | |  | ✓ |  |  | Cleaning low surfaces |
| **Crawling** | | ✓ |  |  |  |  |
| **Gripping** | |  |  |  | ✓ | Cleaning equipment, mop handle, bin liners |
| **Forward Reach** | |  |  | ✓ |  | Cleaning surfaces, wiping benches |
| **Overhead Reach** | | ✓ |  |  |  |  | **Risk of developing a MSI** |
| **Lift** | |  | ✓ |  |  | Bin liners, mop bucket, bin lids | [_wsb_308x215_Body+Chart](http://www.apta.org/AM/Template.cfm?Section=PT_and_Y%60our_Body&Template=/APTAAPPS/PTandYourBody/ptandyourbody.cfm) |
| **Carry** | |  | ✓ |  |  | Full bin liners to the industrial bin |
| **Push / Pull** | |  |  | ✓ |  | Mopping, squeegee use, wiping surfaces |
| N = Never, O = Occasional (1–33%), F = Frequent (34–66%), C = Constant (67–100%) | | | | | | |
| **Repetitive action / sustained posture** | | | | | | |
| **Shoulders:**  **Lower Back:**  **Repetition:** | Repetitive movement when cleaning.  Sustained push / pull action when mopping.  Awkward posture when cleaning lower surfaces.  Repetitive bending when cleaning.  Cleaning time will vary depending on the size of the kitchen and amount of equipment.  Deep cleaning will often occur at the end of the evening meal service and may often be completed by one or two staff members. | | | | | |
| **Lift/Push/Pull demands-Medium** | | | | | | |

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| SWP_logo | | **Role** | | | **Commercial kitchen staff resident care facility** | |
| **Task** | | | **Bench Tasks** | |
| * Bench tasks include preparing food such as sandwiches or preparing items for cooking (e.g. peeling and grating vegetables). * Various equipment is used including chopping boards, knives, graters, slicing equipment and food containers. * A worker may complete tasks independently or working with others in a production line with each person completing specific tasks such as traying and plating up meals. * Large trays may be filled with food ready for cooking and placing in an oven (weights vary with an average 5kg to 9kg for large trays). | | | | | | |
| PC232357 | teagan 088 | | | teagan 087 | | IMG_5551 |
| Trays, chopping boards and preparation items are often stored below benches. Lift up to 6kg. | Chopping and cutting of food occurs using a knife and chopping board. | | | Meals may be served up using spoons and ladles at benches. This may occur in a production line of several workers. | | Various containers, trays and food packaging is lifted and moved when completing bench tasks. |
| P1080014 P1080016 P1080013 | | | IMG_5554 IMG_5557 IMG_5558 | | | |
| Various kitchen utensils are used when chopping, slicing, grating or preparing vegetables, fruit and items for meals. | | | A common bench task involves making sandwiches. Various ingredients are placed out on the bench and multiple sandwiches are made at a time. | | | |

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| **Critical physical demands** | | | | | | | |
| **Physical Demand** | | **N** | **O** | **F** | **C** | **Description** | |  |  | | --- | --- | | **Critical range of motion** | Shoulder to 130 degrees flexion. | | **Lift capacity** | Up to 9kg large trays. | | **Push / Pull force** | Light force cutting and chopping. | | **Shift duration / Roster** | Variable shift times and durations for kitchen workers. | | **Environmental factors** | Indoors in a commercial kitchen. | | **Task rotation** | Varies, some workers may remain on a task for up to 30 minutes or longer (e.g. sandwiches). | | **Breaks** | Various depending on shift duration. | | **PPE** | Closed in shoes, apron and gloves as needed. | |
| **Sitting** | | ✓ |  |  |  |  |
| **Standing** | |  |  |  | ✓ | Various surfaces, can be wet in the kitchen |
| **Walking** | |  | ✓ |  |  | Short distances |
| **Climbing** | | ✓ |  |  |  |  |
| **Stooping** | | ✓ |  |  |  |  |
| **Bending** | |  | ✓ |  |  | Leaning forwards over the bench |
| **Kneeling** | | ✓ |  |  |  |  |
| **Squatting** | | ✓ |  |  |  |  |
| **Crawling** | | ✓ |  |  |  |  |
| **Gripping** | |  |  |  | ✓ | Utensils, food items, containers and equipment |
| **Forward Reach** | |  |  | ✓ |  | Accessing food items and equipment |
| **Overhead Reach** | | ✓ |  |  |  |  | **Risk of developing a MSI** |
| **Lift** | |  |  | ✓ |  | Small food items, trays and equipment<9kg | [_wsb_308x215_Body+Chart](http://www.apta.org/AM/Template.cfm?Section=PT_and_Y%60our_Body&Template=/APTAAPPS/PTandYourBody/ptandyourbody.cfm) |
| **Carry** | | ✓ |  |  |  |  |
| **Push / Pull** | |  |  | ✓ |  | Chopping food items |
| N = Never, O = Occasional (1–33%), F = Frequent (34–66%), C = Constant (67–100%) | | | | | | |
| **Repetitive action / sustained posture** | | | | | | |
| **Shoulders:**  **Lower Back:**  **Repetition:** | Repetitive reaching and movements.  Repetitive forward bending.  Bench tasks are completed throughout the day.  Some workers may be stationed in an area preparing sandwiches or similar meals.  Others may be stationed at a bench preparing vegetables.  Repetitive movements involve leaning forwards and reaching for items. | | | | | |
| **Lift/Push/Pull demands-Light** | | | | | | |

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| SWP_logo | | | **Work Area** | | **Kitchen worker resident care facility** | |
| **Task** | | **Material handling in cool room freezer and cold larder** | |
| * Various cool rooms, freezer and cool food preparation areas (i.e. cold larder) are used for storage and preparation of food. Temperature checks are completed regularly. * Items are stored in cartons, milk crates, vacuum sealed bags and various packaging. * Weights vary up to 18kg (milk crate with 3L containers), 15kg frozen food cartons various weights for cold and frozen stock. * Stock may be unpacked and placed on shelving. Expiry dates are checked and stock is frequently. | | | | | | |
| P1302557P1302558 | | PC232372 | | DSC_0250 | | PC232371 |
| Cool rooms have shelving and racking for storing items. Cartons and containers can weigh up to 15kg (3 x 5kg chip packages). | | Items stored in cool rooms vary in weight and size. Stock is rotated and dates checked regularly. | | Trolleys may be placed into cool rooms to store desserts, food items and cold stock. | | Cartons may be pushed and pulled to place them on or off the shelving. |
| PC222336 |  | | | P1302551 | | teagan 096 |
| Some areas may have compactus units. Workers use a lunge action to move the units. | Some reaching is required for access shelving and stock above shoulder height. | | | Cold meats may be stored in shrink wrapping and random weights. Most are below 8kg per package. | | Stock may be placed onto shelving and reaching above shoulder height is required. |

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| **Critical Physical Demands** | | | | | | | |
| **Physical Demand** | | **N** | **O** | **F** | **C** | **Description** | **Critical range of motion:** Shoulder to 120 degrees flexion.  **Lift capacity:** Up to 18kg milk, up to 15kg cartons.  **Push / Pull force:** Light force moving cartons on / off shelving.  **Shift duration / Roster:** Variable shift times and durations for kitchen workers.  **Environmental factors:** Cool room and freezer. Below 4°C in cool room, below 0°C in freezers.  **PPE:** Closed in shoes, thermal jacket and gloves in some freezers.  **Task rotation:** Short periods mostly in cool rooms or freezers.  **Breaks:** Various depending on shift duration. |
| **Sitting** | | ✓ |  |  |  |  |
| **Standing** | |  |  |  | ✓ | Various surfaces, can be icy in freezers |
| **Walking** | |  |  |  | ✓ | Short distances mostly |
| **Climbing** | | ✓ |  |  |  |  |
| **Stooping** | | ✓ |  |  |  |  |
| **Bending** | |  | ✓ |  |  | Accessing lower shelving |
| **Kneeling** | | ✓ |  |  |  |  |
| **Squatting** | |  | ✓ |  |  | Accessing lower shelving |
| **Crawling** | | ✓ |  |  |  |  |
| **Gripping** | |  |  | ✓ |  | Cartons, food containers, packaging, trolleys |
| **Forward Reach** | |  | ✓ |  |  | Pushing and turning chairs |
| **Overhead Reach** | |  | ✓ |  |  | Accessing high shelves | **Risk of developing a MSI** |
| **Lift** | |  | ✓ |  |  | Up to 18kg milk crate, 15kg cartons of stock | [_wsb_308x215_Body+Chart](http://www.apta.org/AM/Template.cfm?Section=PT_and_Y%60our_Body&Template=/APTAAPPS/PTandYourBody/ptandyourbody.cfm) |
| **Carry** | |  | ✓ |  |  | Up to 18kg milk crate, 15kg cartons of stock |
| **Push / Pull** | |  | ✓ |  |  | Light force placing / removing cartons/ stock |
| N = Never, O = Occasional (1–33%), F = Frequent (34–66%), C = Constant (67–100%) | | | | | | |
| **Repetitive Action / Sustained Posture** | | | | | | |
| **Shoulders:**  **Lower Back:**  **Repetition:** | Reaching above shoulder height.  Lifting up to 18kg.  Lifting up to 18kg from ground level.  Tasks in a cool room vary from retrieving a few items, to unpacking a delivery and putting stock away.  Workers tend to access the cool room and freezers as needed.  Occasional deep cleaning or scraping away ice occurs with some freezer floors. | | | | | |
| **Lift/Push/Pull demands-Medium** | | | | | | |

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| SWP_logo | | **Role** | | | **Commercial kitchen staff resident care facility** | |
| **Task** | | | **Dishwasher tasks** | |
| * Dishwashers vary between facilities. * Workers scrape the food from the trays and crockery before placing them into plastic trays. * Trays are placed into the dishwasher or onto the conveyor. * After washing items are removed from trays and stacked away onto racking, shelving or storage units. * Larger containers are hand washed in deep sinks. Ie: bowls, trays, cooking equipment and large utensils. | | | | | | |
| PC232354 | P1080029 PC232363 | | |  | | PC222277 |
| Large items are washed at sinks. Most sinks have a moveable tap head for rinsing. | Dishes and trays are washed by hand in large sinks. Items are rinsed off and then dried. | | | Food trolleys are placed near ‘stripping’ area. Meal trays removed and stripped of containers, utensils and food. | | Items to be washed are placed on dishwasher trays by workers. |
| PC222340 PC222339 PC222338 | | | IMG_5533 | | | |
| Dishwasher trays are pushed into the dishwasher. Handle pulled down to activate the wash cycle. On completion, handle raised and dishwasher tray is pulled along to bench on clean side for down loading. | | | Clean items are stacked and stored on trolleys/shelves. | | | |

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| **Critical physical demands** | | | | | | | |
| **Physical Demand** | | **N** | **O** | **F** | **C** | **Description** | |  |  | | --- | --- | | **Critical range of motion** | Shoulder up to 140 degrees flexion.(Overhead reach) | | **Lift capacity** | Pots, pans and trays up to 10kg. | | **Push / Pull force** | Pull down force up to 5kgF. | | **Environmental factors** | Wet floors. Anti-fatigue matting. Hot items | | **Job rotation** | May rotate between clean and dirty side | | **PPE** | Closed-in impervious shoes, aprons, gloves | |
| **Sitting** | | ✓ |  |  |  |  |
| **Standing** | |  |  |  | ✓ | Wet surfaces around the sinks and dishwasher |
| **Walking** | |  |  | ✓ |  | Short distances |
| **Climbing** | | ✓ |  |  |  |  |
| **Stooping** | |  | ✓ |  |  | Sink work |
| **Bending** | |  | ✓ |  |  | Collecting trays from the trolleys |
| **Kneeling** | | ✓ |  |  |  |  |
| **Squatting** | |  | ✓ |  |  | Collecting trays from the trolleys |
| **Crawling** | | ✓ |  |  |  |  |
| **Gripping** | |  |  |  | ✓ | Cutlery, crockery, trays and bowls |
| **Forward Reach** | |  |  |  | ✓ | Rinsing and removing food scraps. Up to 400mm |
| **Overhead Reach** | |  | ✓ |  |  | Pull down/raise dishwasher handle | **Risk of Musculoskeletal Injury** |
| **Lift** | |  |  | ✓ |  | Up to 10kg large cooking items | **[_wsb_308x215_Body+Chart](http://www.apta.org/AM/Template.cfm?Section=PT_and_Y%60our_Body&Template=/APTAAPPS/PTandYourBody/ptandyourbody.cfm)** |
| **Carry** | |  | ✓ |  |  | Large trays, bowls and cooking equipment |
| **Push / Pull** | |  |  | ✓ |  | Moving trays, pulling down dishwasher handle, moving trolleys. up to 5kgF |
| N = Never, O = Occasional (1–33%), F = Frequent (34–66%), C = Constant (67–100%) | | | | | | |
| **Repetitive action / sustained posture** | | | | | | |
| **Shoulders:**  **Lower Back:**  **Repetition:**  **Lift/Push/Pull demands-Medium** | Repetitive movement scraping, cleaning and washing items.  Awkward posture reaching above head height.  Awkward posture bending forward when retrieving meal trays from the trolley.  Dishwashing varies depending on how many meals, the equipment used and service (i.e. breakfast, lunch or tea). | | | | | |

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| SWP_logo | | **Role** | | **Commercial kitchen staff resident care facility** | |
| **Task** | | **Food distribution** | |
| * Distribution of food involves the plating up of meals and trays in the kitchen area. Often in a process line or using a conveyor. * Completed trays are placed onto trolleys. Trays often include a main meal, drink, bread / roll, salad and/or desert. * Trolleys are pushed around the facility to dining areas or to resident rooms. Distances vary as will srufaces and force required. * Tea and coffee are served from small trolleys from dining rooms and resident rooms. | | | | | |
| PC232370 | jd 113 | | P7190206 | | PC222322 |
| Meals are plated up often along a serving line with several kitchen staff. | A Bain Marie is often used to serve meals from and plate up. | | Workers hold a plate and scoop food from the Bain Marie and place onto the plate. | | Workers may rotate this task during the meal service. |
| jd 114 | PC232352 | |  | | P1130163 |
| Completed meals are placed onto trays and then onto trolleys. | Trolleys are filled with meal trays. Sizes of trolleys will vary from single rows to three rows. | | Meal trolleys are pushed to the dining areas or to individual resident rooms. Forces vary depending on the trolley. | | Tea and coffee is distributed from smaller trolleys both in between meals and with main meals. |

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| **Critical physical demands** | | | | | | | |
| **Physical Demand** | | **N** | **O** | **F** | **C** | **Description** | |  |  | | --- | --- | | **Critical range of motion** | Shoulder to 90 degrees flexion. | | **Lift capacity** | Trays up to 6kg. | | **Push / Pull force** | Force up to 10kgF for heavy large meal trolleys on carpet or up sloping surfaces. | | **Shift duration / Roster** | Variable shift times and durations for kitchen workers. | | **Environmental factors** | Indoors working in a commercial kitchen. | | **Task rotation** | Rotation may be used when plating up large numbers of meals. | | **Breaks** | Various depending on shift duration. | | **PPE** | Closed-in shoes, apron as needed and gloves as needed. | |
| **Sitting** | | ✓ |  |  |  |  |
| **Standing** | |  |  |  | ✓ | Various surfaces, can be wet in the kitchen |
| **Walking** | |  |  |  | ✓ | Various distances pushing meal trolleys |
| **Climbing** | | ✓ |  |  |  |  |
| **Stooping** | | ✓ |  |  |  |  |
| **Bending** | |  | ✓ |  |  | Placing meals lower down on the trolley |
| **Kneeling** | | ✓ |  |  |  |  |
| **Squatting** | |  | ✓ |  |  | Placing meals lower down on the trolley |
| **Crawling** | | ✓ |  |  |  |  |
| **Gripping** | |  |  |  | ✓ | Meal trays, plates, food trolleys |
| **Forward Reach** | |  |  | ✓ |  | Plating up meals, loading and pushing trolleys |
| **Overhead Reach** | | ✓ |  |  |  |  | **Risk of developing a MSI** |
| **Lift** | |  |  | ✓ |  | Meal trays up to 6kg when full | [_wsb_308x215_Body+Chart](http://www.apta.org/AM/Template.cfm?Section=PT_and_Y%60our_Body&Template=/APTAAPPS/PTandYourBody/ptandyourbody.cfm) |
| **Carry** | |  | ✓ |  |  | Meal trays short distances trolley to resident |
| **Push / Pull** | |  |  | ✓ |  | Variable force depending on trolley and surface |
| N = Never, O = Occasional (1–33%), F = Frequent (34–66%), C = Constant (67–100%) | | | | | | |
| **Repetitive action / sustained posture** | | | | | | |
| **Shoulders:**  **Lower Back:**  **Repetition:** | Sustained force pushing trolleys longer distances.  Repetitive reaching when traying up meals and loading trolleys.  Repetitive bending and awkward posture loading the trolley.  Food trolleys are between the kitchen and dining areas on various surfaces.  Some residents will eat in their room.  Tea and coffee is distributed up to 5 times a day. | | | | | |
| **Lift/Push/Pull demands-Medium** | | | | | | |

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| SWP_logo | | | **Role** | | | **Commercial kitchen staff resident care facility** | |
| **Task** | | | **Food preparation tasks** | |
| * Food preparation tasks involves various food handling and preparation. * Food items are collected from storage areas, coolrooms and freezers. * Food is prepared on benching, using equipment such as mixers, slicers and ovens. Various containers, trays and bowls are used. * Various equipment is used including chopping boards, knives, graters, slicing equipment and food containers. * Rotation with other workers may occur during a shift. | | | | | | | |
| P1302568 | | P1302547 | | | PC232373 | | P1302578 |
| Chopping and cutting of food occurs using a knife and chopping board. | | Workers may make sandwiches, desserts, fruit salad and other small items using a bench, trolley and waste bin for off cuts. | | | Storage areas vary. Some sites will have step ladders or compactus units for dry store areas. | | Some tasks will involve repetitive processes such as making and bagging toast, or bagging cutlery. |
| PC222332 | PC222325 | | | IMG_5554 IMG_5557 IMG_5558 | | | |
| Preparing food from a work bench is common and may involve forward reach or bending to access food items. | Food is prepared on oven cooktops, baked in ovens and various containers. Weights vary, with some empty pots up to 8kg. | | | Food such as sandwiches, desserts and plating up meals may occur with one or more workers. Reaching and some forward bending may occur when accessing the centre of a bench or work area. | | | |

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| **Critical physical demands** | | | | | | | |
| **Physical Demand** | | **N** | **O** | **F** | **C** | **Description** | |  |  | | --- | --- | | **Critical range of motion** | Shoulder to 110 degrees flexion. | | **Lift capacity** | Can be in excess of 15kg for full pots or trays. | | **Push / Pull force** | Light force cutting and chopping. | | **Shift duration / Roster** | Variable shift times and durations for kitchen workers. | | **Environmental factors** | Indoors in a commercial kitchen. | | **Task rotation** | Varies, some workers may remain on a task for up to 30 minutes or longer (e.g. sandwiches, making toast). | | **Breaks** | Various depending on shift duration. | | **PPE** | Closed-in shoes, apron and gloves as needed. | |
| **Sitting** | | ✓ |  |  |  |  |
| **Standing** | |  |  |  | ✓ | Various surfaces, can be wet in the kitchen |
| **Walking** | |  |  | ✓ |  | Short distances inside the kitchen |
| **Climbing** | |  | ✓ |  |  | Small step ladder in some store rooms |
| **Stooping** | | ✓ |  |  |  |  |
| **Bending** | |  | ✓ |  |  | Leaning forwards over the bench |
| **Kneeling** | | ✓ |  |  |  |  |
| **Squatting** | | ✓ |  |  |  |  |
| **Crawling** | | ✓ |  |  |  |  |
| **Gripping** | |  |  |  | ✓ | Utensils, food items, containers and equipment |
| **Forward Reach** | |  |  | ✓ |  | Accessing food items and equipment |
| **Overhead Reach** | | ✓ |  |  |  |  | **Risk of developing a MSI** |
| **Lift** | |  |  | ✓ |  | Small food items, trays and equipment<9kg | [_wsb_308x215_Body+Chart](http://www.apta.org/AM/Template.cfm?Section=PT_and_Y%60our_Body&Template=/APTAAPPS/PTandYourBody/ptandyourbody.cfm) |
| **Carry** | |  | ✓ |  |  | Trays and pots weight above 15kg |
| **Push / Pull** | |  |  | ✓ |  | Chopping food items |
| N = Never, O = Occasional (1–33%), F = Frequent (34–66%), C = Constant (67–100%) | | | | | | |
| **Repetitive action / sustained posture** | | | | | | |
| **Shoulders:**  **Lower Back:**  **Repetition:** | Repetitive reaching and movements.  Repetitive forward bending.  Lifting above 15kg e.g. large pots with water/soup.  Food preparation occurs at benches and on trolleys. Ovens and cooking equipment is used.  Depending on the size of the facility 100+ meals may be made for each food service.  Repetitive movements involve leaning forwards and reaching for items. | | | | | |
| **Lift/Push/Pull demands-** **Medium** | | | | | | |

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| SWP_logo | | **Role** | | **Commercial kitchen staff resident care facility** | |
| **Task** | | **Moving trolleys** | |
| * Various trolleys and items on wheels are pushed and moved in the kitchen area including distribution trolleys, tea trolleys, serving trolleys and small trolleys for transporting drink containers and smaller items. * The size and weight of trolleys will vary with some involving plastic tubing and light eight design, whereas other may be heavier metal trolleys and carry up to 24 meal trays. * Worker push trolley varying distances inside the kitchen itself and to dining areas or resident rooms. | | | | | |
| P1100734 |  | | PC232352 | | P6210572 |
| Meal trolleys vary in size and shape. When empty they range up to 3 to 4kgf to push or pull. | Workers often hold the trolleys on the sides and tuck their arms into their sides. | | When trolleys have been filled with meals they can range from 5kgf to 10kgf when pushing or pulling them. | | Different size and shape trolleys are used to transport meals, tea and coffee, drinks and kitchen stock. |
| 28 09 10 017 |  | |  | | PC222349 |
| When pushing smaller trolley workers grip either the handles or use the edges of the trolley. | Trolleys with tea and coffee on them are pushed several times during the day to serve residents. | | Meal trolleys may be pushed to dining areas or to individual resident rooms. | | Some trolleys will have brakes on them. Some will also have a tracking function (usual a green tab). |

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| **Critical physical demands** | | | | | | | |
| **Physical Demand** | | **N** | **O** | **F** | **C** | **Description** | |  |  | | --- | --- | | **Critical range of motion** | Shoulder to 90 degree degrees flexion. | | **Lift capacity** | N/A. | | **Push / Pull force** | Force up to 10kgf for heavy large meal trolleys on carpet or up sloping surfaces. | | **Shift duration / Roster** | Variable shift times and durations for kitchen workers. | | **Environmental factors** | Indoors pushing meal trolley around a facility. | | **Task rotation** | Pushing trolleys may take several minutes if moving multiple trolleys. | | **Breaks** | Various depending on shift duration. | | **PPE** | Closed-in shoes. | |
| **Sitting** | | ✓ |  |  |  |  |
| **Standing** | |  |  |  | ✓ | Various surfaces, can be wet in the kitchen |
| **Walking** | |  |  |  | ✓ | Various distances pushing meal trolleys |
| **Climbing** | | ✓ |  |  |  |  |
| **Stooping** | | ✓ |  |  |  |  |
| **Bending** | | ✓ |  |  |  |  |
| **Kneeling** | | ✓ |  |  |  |  |
| **Squatting** | | ✓ |  |  |  |  |
| **Crawling** | | ✓ |  |  |  |  |
| **Gripping** | |  |  |  | ✓ | Trolley handles or edges |
| **Forward Reach** | |  |  | ✓ |  | Holding the trolley |
| **Overhead Reach** | | ✓ |  |  |  |  | **Risk of developing a MSI** |
| **Lift** | | ✓ |  |  |  |  | [_wsb_308x215_Body+Chart](http://www.apta.org/AM/Template.cfm?Section=PT_and_Y%60our_Body&Template=/APTAAPPS/PTandYourBody/ptandyourbody.cfm) |
| **Carry** | | ✓ |  |  |  |  |
| **Push / Pull** | |  |  |  | ✓ | Variable force depending on trolley and surface |
| N = Never, O = Occasional (1–33%), F = Frequent (34–66%), C = Constant (67–100%) | | | | | | |
| **Repetitive action / sustained posture** | | | | | | |
| **Shoulders:**  **Lower Back:**  **Repetition:** | Sustained force pushing trolleys longer distances.  Sustained force pushing trolleys longer distances in some facilities.  Pushing meal trolleys occurs throughout the day inside the kitchen.  Meals are distributed 3 times a day.  Tea and coffee trolleys may be used up to 5 times a day. | | | | | |
| **Lift/Push/Pull demands-Medium** | | | | | | |

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| SWP_logo | | | **Role** | | | **Commercial kitchen staff resident care facility** | | |
| **Task** | | | **Use of Kitchen Equipment** | | |
| * Kitchen equipment will vary depending on the facility and size. * Common equipment includes ovens, mixing equipment, meat slicers, oven cook tops, large bowls, hand held mixers and commercial cooking items. Some arm vibration may occur when holding mixing equipment and small appliances. * Weights and sizes will vary with large mixing bowls when full weight between 15kg and 20kg. * Some sites will have multiple ovens, some will be raised ovens and others will be under a stove cook top. | | | | | | | | |
|  | |  | | | jd 121 | | |  |
| Large ovens are used for cooking large meal trays. | | Trays are placed into ovens. Trays will vary in weight depending on the size of the oven and contents. | | | Cooktops are used for making soup, frying and preparing vegetables. | | | Ovens may be under stove cooktops. |
| jd 122 | jd 123 | | |  | | | DSC_0253 PC232367 | |
| Mixing and measuring equipment is used when preparing meals. | Large bowls are used for making dough. | | | Large mixers are used for stirring dough and other food items. | | | Slicing machines are used for slicing cold meals and making sandwiches. Some slices may be automated whereas others will require a worker  to push the handle forward and back to slice. | |

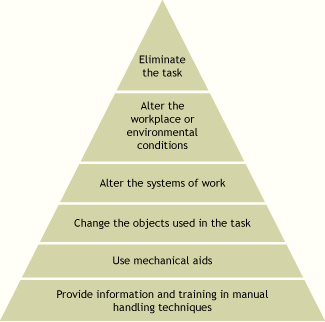
|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Critical physical demands** | | | | | | | |
| **Physical Demand** | | **N** | **O** | **F** | **C** | **Description** | |  |  | | --- | --- | | **Critical range of motion** | Shoulder to 90 degrees flexion. | | **Lift capacity** | Various trays and containers. Can be as high as 20kg for some bowls and mixes. | | **Push / Pull force** | Various, using the slicer, loading and unloading ovens. | | **Shift duration / Roster** | Variable shift times and durations for kitchen workers. | | **Environmental factors** | Indoors around hot surfaces and equipment. | | **Task rotation** | Equipment is used for varying duration. | | **Breaks** | Various depending on shift duration | | **PPE** | Closed-in shoes, oven gloves and aprons / gloves as needed. | |
| **Sitting** | | ✓ |  |  |  |  |
| **Standing** | |  |  |  | ✓ | Various surfaces |
| **Walking** | |  | ✓ |  |  | Short distances mostly |
| **Climbing** | | ✓ |  |  |  |  |
| **Stooping** | | ✓ |  |  |  |  |
| **Bending** | |  | ✓ |  |  | Accessing low ovens, equipment from shelves |
| **Kneeling** | | ✓ |  |  |  |  |
| **Squatting** | |  | ✓ |  |  | Lifting heavy items such as mixing bowls |
| **Crawling** | | ✓ |  |  |  |  |
| **Gripping** | |  |  |  | ✓ | Equipment, oven doors, mixers |
| **Forward Reach** | |  |  | ✓ |  | Access oven, using mixing / slicing equipment |
| **Overhead Reach** | | ✓ |  |  |  |  | **Risk of developing a MSI** |
| **Lift** | |  |  | ✓ |  | Up to 20kg bowl and mix | [_wsb_308x215_Body+Chart](http://www.apta.org/AM/Template.cfm?Section=PT_and_Y%60our_Body&Template=/APTAAPPS/PTandYourBody/ptandyourbody.cfm) |
| **Carry** | |  |  | ✓ |  | Trays and bowl when using equipment / ovens |
| **Push / Pull** | |  |  |  | ✓ | Loading ovens, moving slicer handle |
| N = Never, O = Occasional (1–33%), F = Frequent (34–66%), C = Constant (67–100%) | | | | | | |
| **Repetitive action / sustained posture** | | | | | | |
| **Shoulders:**  **Lower Back:**  **Repetition:** | Awkward posture reaching forwards.  Repetitive movement using a slicer or mixer.  Arm vibration using hand held mixers.  Lift up to 20kg bowl and mix.  Awkward posture bending to access low ovens or equipment.  Equipment in a kitchen is used for varying duration. Some equipment involves repetitive movements such as slicing meat. Others involve one off movements such as loading a mixing bowl on a mixer. | | | | | |
| **Lift/Push/Pull demands-Medium** | | | | | | |

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| --- | --- | --- |
| **Description: cid:image001.jpg@01CB1834.70361670** | | **Job Dictionary**  **Definitions** |
| **Risk of developing a Musculoskeletal Injury (MSI)** | | |
| **Risk of Musculoskeletal Injury**  **Red** = **High** (e.g. repetitive movement, sustained awkward positioning, high force / very heavy lift)  **Yellow** = **Medium** (e.g. repetitive movement, high force/heavy lift, awkward position)  **Green**= **Low** (e.g. repetitive movement, awkward position e.g. bending)  _wsb_308x215_Body+Chart | | |
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| **‘Lift/push/ pull physical demands’** | | |
| **Very Light Work** | Lifting and carrying < 5kg. Variable posture sitting, standing and walking. Pushing up to 2kg Force and pulling up to 2kg Force occasionally at waist level. | |
| **Light Work** | Lifting and carrying up to 10kg maximum. Frequent lifting and / or carrying of objects weighing up to 5kg. Pushing up to 5kg Force and pulling up to 5kg Force occasionally at waist level. | |
| **Medium Work** | Lifting and carrying up to 22kg maximum. Frequent lifting and / or carrying of objects weighing up to 10kg. Pushing up to 12kg Force and pulling up to 12kg Force occasionally at waist level. | |
| **Heavy Work** | Lifting up to 45kg maximum. Frequent lifting and / or carrying of objects weighing up to 22kg. Pushing up to 24kg Force and pulling up to 24kg Force occasionally at waist level. | |
| **Very Heavy Work** | Lifting above 45kg maximum. Frequent lifting and / or carrying of objects weighing above 22kg. Pushing up to 35kg Force and pulling up to 35kg Force occasionally at waist level. | |

Adapted from Physical Work Demands, from the U.S. Department of Labor Dictionary of Occupational Titles, Fourth Edition, Supplement, Appendix D, pp 101-102, 1986 with conversion to metric system.

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| --- | --- | --- | --- | --- |
| **Frequency of Task** | | | | |
|  | **Non-material handling** | **Non-material handling** | **Material handling** |
| **Never (N)** | 0% of 8hr/day | No reps/day | No reps/day |
| **Occasionally (O)** | 6-33% of 8hr/day  20 mins/hr | 0–100 reps/day  1/3 of full day | 3–32 reps/day  1 lift every 20 mins |
| **Frequently (F)** | 34-66% of 8hr/day  20-40 mins/hr | 101–800 reps/day  1/3 - 2/3 of full day | 33–200 reps/day  1 lift every 2 mins |
| **Constantly (C)** | 67-100% of 8hr/day  41-60 mins/hr | >800 reps/day  2/3 to a full day | >200 reps/day  1 lift every 15 sec |
| **Repetitive action/sustained posture**   * Repetitive means the movement or force is performed more than twice a minute * Sustained means the posture of force is held for more than 30 seconds at a time   Reference: Hazardous Manual tasks Code of Practice 2011 | | | |

**Reducing the risk of injury and re-injury[[1]](#footnote-1)**



<http://www.ectarc.com.au/cybertots/toolbox12_11/shared/resources/html/res_manualhand.htm>

The Hierarchy of Control is a list of control measures, in order of priority, which can be used to eliminate or minimise exposure to the hazard. Adopting appropriate and safe handling techniques and avoiding sustained and repetitive postures and actions is encouraged to prevent cumulative and reoccurring musculo skeletal injuries. Using appropriate and safe manual techniques is a lower order in the hierarchy of controls and where possible and practical, should be replaced with higher order solutions such as use of mechanical aids.

Consider using equipment that reduces physical handling, and encourages client participation. This could result in needing fewer workers to do the task and will lessen the likelihood of worker injury.

Some equipment can eliminate the need for assistance by allowing a resident/client to be totally independent.

Equipment is available for non-people handling tasks that reduced the need to undertake repetitive and sustained actions. E.g. trolley movers and pill crushers

Here are examples of equipment solutions currently in use across South Australia in hospitals, in the community and residential care facilities. For more information about specific equipment items please contact the Independent Living Centre on (08) 82665263 or undertake a product search on <http://ilcaustralia.org.au/search_category_paths>.

|  |  |  |
| --- | --- | --- |
| **Equipment** | **Use** |  |
| Getting people off the floor  Manger Camel  Hoverjack  Raizer | Lifts a person from the floor up into a sitting position. (Air assisted device)  Lifts a person from the floor with patient supine. (Air assisted device)  Raises a person from the floor up into a sitting position | Mangar Camel Floor Lift  http://www.statinahealthcare.com.au/wp-content/uploads/2014/07/HoverJack-use1-800px.jpg |
| Repositioning in bed  Air assisted Transfer mats. Reusable or single patient use (SPU)  HT Roller  Turning sheet  Beds with turning functions or transfer systems that attach to beds  E.g. Linet Turning bed. Vendlet turning system | Placed under bottom sheet. Used to reposition heavy clients/residents in bed  Turns a client in bed using a Hovertech® dual speed air supply  Used with hoist or ceiling lifter to turn a heavier patient in bed  Mechanical Turning functions | http://www.vendlet.com/admin/public/getimage.ashx?image=/Files/Images/Vendlet/Produkter/VENDLET/VENDLET-V5.jpg&crop=0&Width=1200  http://www.linet.com/-/media/Media-Catalogue/photos/beds/latera-acute/pluses/acute_00117.ashx?bc=White&as=1&h=450&w=800&hash=7DB3486B7734EA98C16DA5E758C9238239ACEDD8    http://www.statinahealthcare.com.au/wp-content/uploads/2014/07/ht-roller-use-800px.jpg |
| Bed to ‘stretch chair’ transfer (a chair that can be moved into a horizontal position)  Air assisted transfer mat  Desirable chair features: electric chair height, back rest and foot rest | Used when lifter sling transfer is too difficult (i.e. bariatric resident), places resident at increased risk of skin injury or pain or if using a lifter sling is contraindicated | [CH-3100A](http://www.highgatehealthcare.com.au/highgate/wp-content/uploads/2015/03/CH-3100A.jpg) |
| Ceiling mounted lifters/gantry lifters | Reduces pushing and pulling forces to move the resident and requires less space to safely move a resident  Can be used with gait harnesses | [Image result for gait harness with ceiling lifter](http://www.google.com.au/url?url=http://www.opemed.net/gait-training-equipment/&rct=j&frm=1&q=&esrc=s&sa=U&ved=0ahUKEwi3hfSFyLfLAhUjhqYKHdyIDggQwW4IFjAA&usg=AFQjCNGTd34AUp0DZfUcoYuQLJ8Z56N08Q)Handi-Move Freedom Bridge Gantry Hoist |
| Leg/limb lifters | Slings to hold legs during nursing tasks  Devices to assist a resident to lift their own legs into bed  Devices to attach to the bed to lift heavier legs | sallysling_leglifter2[Image result for leg lifter](http://www.google.com.au/url?url=http://www.arthritissupplies.com/leg-lifter.html&rct=j&frm=1&q=&esrc=s&sa=U&ved=0ahUKEwjDs6jQ0bfLAhUBUKYKHekoCfUQwW4IJjAE&usg=AFQjCNESZT9LYM-kHS45dK2IuHN7cRhDzQ) |
| Motorising Trolleys | Many trolleys, medication cartes, Bain maries can be retrofitted with a motorised unit to prevent sustained and heavy pushing | [http://www.phantompower.com.au/images/trollee.jpg](http://www.phantompower.com.au/products/trollee.html?id=76) |
| Detachable Mechanical moving devices | ‘Turtle’- used to move occupied Comfort chairs or bins  Wheelchair drive kits | [http://www.phantompower.com.au/images/TURTLE.jpg](http://www.phantompower.com.au/products/the-turtle.html?id=78)[Bin Mover](http://www.phantompower.com.au/products/bin-mover/84-products/108-bin-mover.html) |
| Lifting wheelchairs into boots | Boot sliding devices to reduce lifting demands |  |
| Mechanical pill crushers | Alleviates repetitive pill grinding actions by shoulders, forearms and hands | http://www.phantompower.com.au/images/process.jpg |

**Glossary of terms and abbreviations**

Abduction: Movement of a body part away from the median plane (of the body, in the case of the limbs; of the hand or foot, in the case of digits).

Adduction: Movement of a body part toward the median plane (of the body, in the case of the limbs; of the hand or foot, in the case of digits).

Bending: To force into a different or particular, especially curved, shape, as by pressure.

Biceps: A muscle with two origins or heads. Commonly used to refer to the biceps brachii muscle.

CPR: Cardio Pulmonary resuscitation

DDA: Dangerous Drugs (drugs of dependence)

Deltoid: Large muscle of the shoulder that abducts and otherwise moves the upper arm about the shoulder joint against external loads.

Distal: Situated away from the centre of the body, or from the point of origin; specifically applied to the extremity or distant part of a limb or organ.

Dorsiflexion: Turning upward of the foot or toes or of the hand or fingers.

Dynamic: The science of motion in response to forces.

Ergonomics: A branch of ecology concerned with human factors in the design and operations of machines and the physical environment.

Extension: The act of bringing the distal portion of a joint in continuity (though only parallel) with the long axis of the proximal portion.

Flexion: The act of flexing or bending, e.g. bending of a joint so as to approximate that parts it connects.

Force: That which tends to produce motion in a body.

Frontal plane: In front; relating to the anterior part of a body.

Gross gripping: Grasping, seizing, holding with a large finger span.

Isometric: In physiology, denoting the condition when the ends of a contracting muscle are held fixed so that the contraction produces increased tension at a constant overall length.

Job: A set of tasks designed to be performed by one individual in return for a wage or salary.

Kyphosis: A deformity of the spine characterised by extensive flexion.

Lordosis: An abnormal extension deformity; anteroposterior curvature of the spine, generally lumbar with the convexity looking anteriorly.

Lumbar: Relating to the loins, or the part of the back and sides between the ribs and the pelvis.

Lumbosacral joint: Joint between fifth lumbar vertebra and sacrum.

Medial: Relating to the middle or centre; nearer to the median or midsagittal plane.

Occupation: A set of jobs with similar sets of tasks.

Plantar flexion: Bending about the ankle joint in the direction of the sole of the foot.

Prehensile: Adapted for taking hold of or grasping.

Pronation of the forearm: Rotation of the forearm in such a way that the palm of the hand faces backward when the arm is in the anatomical position, or downward when the arm is extended at a right angle to the body.

Proximal: Nearest the trunk or the point of origin, said of part of a limb

Pulmonary: Pertaining to the lung.

Range of motion: The range of translation and rotation of a joint for each of it degrees of freedom.

Rotation: Turning or movement of a body round its axis.

Stiffness: Rigid or firm in substance; not flexible, pliant or easily bent.

Strain: To make an effort to the limit of one’s strength; or, the change in shape that a body undergoes when acted upon by an external force.

Stress: The force or pressure applied or exerted between portion of a body or bodies, generally expressed in pounds per square inch.

Supination: Supination of the forearm: Rotation of the forearm in such a way that the palm of the hand faces forward when the arm is in the anatomical position, or upward when the arm is extended at a right angle to the body.

Torsion: Twisting or rotation of a part upon its long axis.

Transverse: Crosswise; lying across the long axis of the body.

Work: That which is accomplished when a force acts against resistance to produce motion.

# Relevant legislation

Work Health and Safety Act 2012 (SA)

The key principles of the *Work Health and Safety Act 2012* (SA) are consistent with long established and familiar occupational health and safety standards.

The Act:

* establishes health and safety duties, including the primary duty to protect any person from exposure to hazards and risks that arise from work
* provides for worker representation, consultation and participation including through Health and Safety Representatives and Health and Safety Committees
* enables compliance and enforcement through SafeWork SA, the regulator
* provides for the creation of regulations and approved codes of practice.

Work Health and Safety Regulations 2012

* Identify the control measures that must be applied to specific work activities and hazards, for example machine guarding and noise exposure.
* Are specific in legal requirements on certain issues.
* Normally related to a particular hazard or activity, e.g. manual tasks.
* May be administrative, e.g. injury reporting
* In the case of manual handling prescribe process that must be followed to achieve a minimum standard of occupational health and safety in the workplace.

**Return to Work Act 2014 (SA)**

The *Return to Work Act 2014* establishes the Return to Work Scheme, which commenced on 1 July 2015. The scheme provides South Australian workers and their employers with a personalised service to achieve the best possible recovery and return to work outcomes in the event of a work injury. Mobile case management has been implemented in regional and metropolitan South Australia to provide face-to-face services, to assist early intervention and targeted return to work services. Workers who are seriously injured may receive income support to retirement age and lifetime care and support. There is also limited access to common law for seriously injured workers. Workers who are less seriously injured may receive time-banded income support which ceases at two years from the date of incapacity. Lump sum payments for economic and non-economic loss are available.

References

*National Code of Practice for the Prevention of Occupational Overuse Syndrome* [NOHSC:2013(1994)] (Archived) <http://www.safework.sa.gov.au/show_page.jsp?id=5892#.VsVvgE9f21s>

*Return to Work Act 2014* (SA)

*Return to Work Regulations 2015* (SA)

*Work Health and Safety Act 2012* (SA) <https://www.legislation.sa.gov.au/LZ/C/A/WORK%20HEALTH%20AND%20SAFETY%20ACT%202012.aspx>

*Work Health and Safety Regulations 2012* (SA) *Code of Practice: Hazardous Manual Tasks* https://www.legislation.sa.gov.au/LZ/C/R/Work%20Health%20and%20Safety%20Regulations%202012.aspx

1. This section as provided by Hal (Helen) Robertson, SA Health [↑](#footnote-ref-1)