

Job Demands Analysis – Kitchen Volunteer Leader (Community Services)

Purpose

The Kitchen Volunteer Leader working for the City of Vancouver's Community Services Group is responsible for the following:

- providing leadership, instruction, skills development and supervision to volunteers in food preparation;
- assisting in menu planning;
- preparing foods and beverages;
- maintaining order and cleanliness;
- assisting in maintaining stock levels and controlling stock by requisitioning kitchen supplies;
- assisting in resolving conflicts and problems involving patrons and volunteers;
- providing informal counseling to volunteers and patrons;
- enforcing facility rules and regulations in a tactful and consistent manner; and
- signing in volunteers for shifts and replacing vacancies.

Essential Duties

The Kitchen Volunteer Leader has two essential duties:

Duty #1 Prepare and Cook Meals

Duty #2 Start-up and Breakfast Preparation (on Sundays only)

Description of Non-essential Tasks

The Kitchen Volunteer Leader may be required to perform other work tasks on an occasional basis. Examples of the tasks that may be performed are:

- Organize stock in storage / cooler / freezer when required (approximately twice per month)
- Assist Security Attendants when required
- Assist patrons who require assistance
- Receive deliveries if short-staffed or in acting position

Summary of Demands

	Sedentary	Light	Medium	Heavy	Very Heavy	Comments
Physical				✓		Based on strength requirements
Cognitive				✓		Works with minimum supervision; ability to interact appropriately with volunteers and patrons

Workers require **physical endurance** due to manual material handling tasks (i. e., for between 34-66 % of their shift).

Shift Structure

The Kitchen Volunteer Leader works four shifts per week. The shift times are as follows: Monday through Saturday 9 am – 6 pm, Sunday 8 am – 5 pm and every day 1 pm – 10 pm. The Food Service Coordinator is allowed a 40 minute lunch break and two 10-minute rest breaks.

Frequency Rating Definitions

The frequency rating definitions used in the Summary Table are from the Dictionary of Occupational Titles (DOT, 1991, 4th edition) published by the US Department of Labor. A similar classification is used for each Essential Duty, but the percentages are changed to reflect % of Duty rather than % of the Job.

	Time per Day	Percentage of Job
Never	0 minutes	0 %
Rare	0 - 5 minutes	0-1 %
Infrequent	6 - 25 minutes	2-5 %
Occasional	26 minutes – 2.5 hours	6-33 %
Frequent	2.6 - 5.25 hours	34-66 %
Constant	5.26 - 8 hours	67-100 %

STRENGTH	
Strength Category	Weight Handled
1. Limited	Up to 5 kg.
2. Light	5 kg. to 10 kg.
3. Medium	10 kg. to 20 kg.
4. Heavy	>20 kg

Job Demands Analysis – Kitchen Volunteer Leader: Summary Table

a. Physical Demands		Frequency During Shift					Weight		Comments	
		Never	Rare	Infrequent	Occasional	Frequent	Constant	Usual (kg)		Max (kg)
Strength	Lifting – Floor to Knuckle					✓		20	33	Lifting as required, e.g. bags, cases, tray packs, pails, bus pans
	Lifting – Knuckle to Waist					✓		20	33	Lifting as required, e.g. bags, cases, tray packs, pails, roasting pans, dirty dishes, water cooler
	Lifting – Over Shoulder				✓			20	33	Lifting as required, e.g. bags, cases, tray packs
	Carrying – with Handles					✓		20	33	Carrying as required. Note: Almost all heavy cases come with handles; one-handed carrying of pails - may carry 2 at a time
	Carrying – without Handles					✓		20	33	Carrying as required
	Pushing – Upper Extremity					✓				Pushing pans into ovens
	Pushing – Hips/Legs assist				✓					Cart with supplies; stirring pot; rolling rack
	Pulling – Upper Extremity					✓				Pulling roasting pan out of oven; pulling pans
	Pulling – Hip/Leg Assist				✓					Cart with supplies; rolling rack

Job Demands Analysis – Kitchen Volunteer Leader: Summary Table (continued)

a. Physical Demands (continued)		Frequency During Shift						Comments
		N	R	I	O	F	C	
Mobility	Reach - Shoulder or Above					✓		Reaching for items in storage; reaching for herbs / spices / lids / containers on overhead shelves; reaching for serving spoons / whisks / tongs / empty dish racks / function boards / handle on dishwasher; retrieving pans from Eloma oven, bus pans, salad spinner
	Reach - Below Shoulder						✓	
	Handling						✓	
	Fine finger movements						✓	Operate controls on equipment; scales; seasoning; teaspoons
	Neck - Static Flexion					✓		Chopping; preparing salads; stirring
	Neck – Static Neutral	✓						
	Neck – Static Extension	✓						
	Neck – Rotation						✓	
	Throwing	✓						
	Sitting	✓						
	Standing					✓		Anti-fatigue matting at dishwashing area
	Walking					✓		
	Running/Jumping		✓					Responding to incidents / alarms
	Climbing		✓					Using 2-step ladder to reach for overhead items - hts. of steps - 10”, 20”
	Bending/Stooping					✓		Retrieving items in storage; lifting pans out of oven; cleaning stock pot
	Crouching			✓				Handling items in storage
	Kneeling	✓						
	Crawling		✓					To see underneath dishwasher
	Twisting			✓				While handling items in storage due to congested area
	Balancing		✓					Step ladder
Travelling	✓							

Job Demands Analysis – Kitchen Volunteer Leader: Summary Table (continued)

a. Physical Demands (continued)		Frequency During Shift						Comments
		N	R	I	O	F	C	
Sensory / Perception	Hear/Conversations						✓	Patrons, volunteers, co-workers
	Hear/Other Sounds						✓	
	Vision/Far						✓	
	Vision/Near						✓	
	Vision/Colour						✓	Ensure food is fresh, safe and aesthetically pleasing
	Vision/Depth						✓	
	Perception/Spatial						✓	
	Perception/Form						✓	
	Feeling						✓	For safety reasons
	Speech						✓	Patrons, volunteers, co-workers
Work Environment	Inside Work						✓	
	Outside Work	✓						
	Slippery			✓				If spills in kitchen
	Congested worksite				✓			If too many people in kitchen; storage areas
	Chemical Irritants			✓				Dishwasher cleaner, bleach, vinegar
	Confined Space Entry	✓						
	Vapour Fumes					✓		Due to windows being open, exposure to exhaust / traffic fumes and smoke (from smoking cigarettes / drugs) outside; steam from dishwasher / kettles
	Noise						✓	People; kitchen equipment; traffic outside (fire trucks, police sirens)
	Proximity to moving objects				✓			Carts; patrons on wheelchairs / scooters; people
	Hazardous Machines					✓		Meat slicer; mixer; Robo Coup; Waring blender; Eloma ovens; steam kettle
	Electrical hazard						✓	Kitchen equipment, outlets
	Hazardous objects						✓	Knives
	Radiant/Thermal Energy					✓		Hot surfaces in kitchen (oven, steam kettle, hot trays, stove)
	Hot/Cold						✓	Constant during inclement weather (especially summer months due to hot weather and use of ovens in kitchen); walk-in cooler (+40° F); walk-in freezer (-20° F); work around 2 sliding door fridges / sandwich cooler
	Humid						✓	Constant during inclement weather; working near Rational oven; steam from kettles
	Environmental Dust						✓	Pollutants
	Organic Substances	✓						
	Medical Waste	✓						
	Blood Products				✓			On meat products
	Lighting – Direct						✓	Natural light outdoors
Lighting – Indirect						✓		
Vibration – Whole Body	✓							
Vibration – Hand/Arm				✓			Robo Coupe food processor - to puree soup	

Job Demands Analysis – Kitchen Volunteer Leader: Summary Table (continued)

b. Cognitive and Psychosocial Demands	Frequency During Shift			Comments
	Never / Rare	Infrequent / Occasional	Frequent / Constant	
Degree of Supervision	✓			
Time Pressure			✓	
Attention to Detail			✓	
Memory Requirements			✓	
Interact with co-workers			✓	
Interact with public			✓	
Work Alone			✓	
Reading		✓		Menus; labels on boxes
Writing		✓		Menu descriptions; food orders
Irregular Hours	✓			During Christmas
Operating Equipment			✓	Kitchen equipment

Physical Environment

Majority of the work takes place at indoor community centres. The facility is also equipped with three storerooms (two on the 2nd floor, one on the 1st floor), walk-in cooler and walk-in freezer.

Staffing Levels

The Supervisor and Assistant Supervisor are available from 9 am – 6 pm. The Kitchen Volunteer Leader works alone from 6 – 10 pm.

Tools and Equipment Used

The Kitchen Volunteer Leader uses a variety of equipment and tools including kitchen equipment and carts.

Other Equipment

Not applicable.

Data Collection

An ergonomics consultant from WorkWell Consulting (Ms. Farzana Ismail) conducted the JDA assessment on February 16th 2009. One Kitchen Volunteer Leader was interviewed and observed performing the job.

Contact for the on-site assessment

Catriona Moore was the management contact for the on-site assessment.

Description of Essential Duties

This section describes the work tasks that comprise the 2 essential duties of the job.

Tables 1 - 2 (located at the end of this report) provide the physical, cognitive and psychosocial demands for performing each of the essential duties. Appendix A provides illustrations of the four essential duties.

Essential Duty 1: Prepare and Cook Meals

Duty 1 includes the following tasks:

- i) Putting away received stock (Duty 1, Task 1)
- ii) Designing the menu (Duty 1, Task 2)
- iii) Ensuring all volunteers are assigned to a job (Duty 1, Task 3).

Essential Duty 2: Start-up and Breakfast Preparation (on Sundays only)

The Kitchen Volunteer Leader is responsible for preparing the breakfast on Sundays only. Duty 2 involves the following tasks:

- i) Floor inspection (Duty 2, Task 1)
- ii) Unlock cabinets, cupboards and equipment (Duty 2, Task 2)
- iii) Check temperature on equipment and ensuring they are running properly (Duty 2, Task 3)
- iv) Turn on gas stove (Duty 2, Task 4)
- v) Open concession and stock (Duty 2, Task 5) – as required
- vi) Prepare potatoes, eggs and fruit salad (Duty 2, Task 6)
- vii) Load dishwasher (Duty 2, Task 7) – as required
- viii) Update staff on daily duties (Duty 2, Task 8)

Table 1: Essential Duty 1 – Prepare and Cook Meals

a. Physical Demands		Frequency During Duty 1					Weight		Comments	
		Never	Rare	Infrequent	Occasional	Frequent	Constant	Usual (kg)		Max (kg)
Strength	Lifting – Floor to Knuckle					✓		20	33	Lifting as required, e.g. bag of flour (20 kg) / beans (12 kg) / carrots (23 kg); cases of celery (20 kg) / potatoes (23 kg) / carrots (23 kg) / onions (23 kg) / meat (20-33 kg) / tomatoes (12 kg); tray packs of juice / pop; buckets of potatoes (10 kg); items in storage stored at 0-90” ht.
	Lifting – Knuckle to Waist					✓		20	33	Lifting as required, e.g. bag of flour (20 kg) / beans (12 kg) / carrots (23 kg); cases of celery (20 kg) / meat (20-33 kg) / tomatoes (12 kg); tray packs of juice / pop; buckets of potatoes (10 kg); roasting pans (23 kg); items in storage stored at 0-90” ht.
	Lifting – Over Shoulder				✓			20	33	Lifting as required, e.g. bag of flour (20 kg), cases of celery (20 kg) / meat (20-33 kg); tray packs of juice / pop; items in storage stored at 0-90” ht.
	Carrying – with Handles					✓		20	33	Carrying as required. Note: Almost all heavy cases come with handles; one-handed carrying of buckets of potatoes (10 kg) - carry 2 at a time
	Carrying – without Handles					✓		20	33	Carrying as required, e.g. bag of flour (20 kg)
	Pushing – Upper Extremity					✓				Pushing pans into ovens
	Pushing – Hips/Legs assist				✓					Cart with supplies; stirring pot (with 200 portions of meat and vegetables); rolling rack with food for volunteer dinner
	Pulling – Upper Extremity					✓				Pulling roasting pan out of oven; pulling pans
	Pulling – Hip/Leg Assist				✓					Cart with supplies; rolling rack with food for volunteer dinner

Mobility	Reach - Shoulder or Above					✓	Reaching for items in storage stored at 0-90" ht.; reaching for herbs / spices on overhead shelves; reaching for lids and containers (ht. 62-77"); reaching for serving spoons / whisks / tongs (ht. 72"); retrieving pans out of Eloma oven; retrieving bus pans (ht. 76"); retrieving salad spinner (ht. 78")
	Reach - Below Shoulder					✓	
	Handling					✓	
	Fine finger movements					✓	Operate controls on equipment; scales
	Neck - Static Flexion					✓	Chopping; preparing salads; stirring
	Neck - Static Neutral	✓					
	Neck - Static Extension	✓					
	Neck - Rotation					✓	
	Throwing	✓					
	Sitting	✓					
	Standing					✓	
	Walking					✓	
	Running/Jumping			✓			Responding to incidents / alarms
	Climbing			✓			Using 2-step ladder to reach for overhead items - hts. of steps - 10", 20"
	Bending/Stooping					✓	Retrieving items in storage - items in storage stored at 0-90" ht.; lifting pans out of oven; cleaning stock pot
	Crouching			✓			Handling items in storage - items in storage stored at 0-90" ht.
	Kneeling	✓					
	Crawling			✓			To see underneath dishwasher
	Twisting			✓			While handling items in storage due to congested area
	Balancing			✓			Step ladder
Travelling	✓						

Frequency Rating Definition for % of Duty

The definitions for frequency ratings are contained at the end of the Table (page 12).

Table 1: Essential Duty 1 – Oversee the kitchen and storage areas (continued)

a. Physical Demands (continued)		Frequency During Duty 1						Comments
		N	R	I	O	F	C	
Sensory / Perception	Hear/Conversations						✓	
	Hear/Other Sounds						✓	
	Vision/Far						✓	
	Vision/Near						✓	
	Vision/Colour						✓	Ensure food is fresh, safe and aesthetically pleasing
	Vision/Depth						✓	
	Perception/Spatial						✓	
	Perception/Form						✓	
	Feeling						✓	For safety reasons
	Speech						✓	
Work Environment	Inside Work						✓	
	Outside Work	✓						
	Slippery			✓				If spills in kitchen
	Congested worksite				✓			If too many people in kitchen; storage areas
	Chemical Irritants			✓				Dishwasher cleaner, bleach, vinegar
	Confined Space Entry	✓						
	Vapour Fumes					✓		Due to windows being open, exposure to exhaust / traffic fumes and smoke (from smoking cigarettes / drugs) outside; steam from dishwasher / kettles
	Noise						✓	People; kitchen equipment; traffic outside (fire trucks, police sirens)
	Proximity to moving objects				✓			Carts; patrons on wheelchairs / scooters; people
	Hazardous Machines					✓		Meat slicer; mixer; Robo Coup; Waring blender; Eloma ovens; steam kettle
	Electrical hazard						✓	Kitchen equipment
	Hazardous objects						✓	Knives
	Radiant/Thermal Energy					✓		Hot surfaces in kitchen (oven, steam kettle, hot trays, stove)
	Hot/Cold						✓	Constant during inclement weather (especially summer months due to hot weather and use of ovens in kitchen); walk-in cooler (+40° F); walk-in freezer (-20° F); work around 2 sliding door fridges / sandwich cooler
	Humid						✓	Constant during inclement weather; working near Rational oven; steam from kettles
	Environmental Dust						✓	Pollutants
	Organic Substances	✓						
	Medical Waste	✓						
	Blood Products				✓			On meat products
	Lighting – Direct						✓	Natural light outdoors
Lighting – Indirect						✓		
Vibration – Whole Body	✓							
Vibration – Hand/Arm				✓			Robo Coupe food processor - to puree soup	

Table 1: Essential Duty 1 – Oversee the kitchen and storage areas (continued)

b. Cognitive and Psychosocial Demands	Frequency During Duty 1			Comments
	Never / Rare	Infrequent / Occasional	Frequent / Constant	
Degree of Supervision	✓			
Time Pressure			✓	
Attention to Detail			✓	
Memory Requirements			✓	
Interact with co-workers			✓	
Interact with public			✓	
Work Alone			✓	
Reading		✓		Menus; labels on boxes
Writing		✓		Menu descriptions; food orders
Irregular Hours	✓			During Christmas
Operating Equipment			✓	Kitchen equipment

Frequency Rating Definitions for % of Duty

The frequency rating definitions are from the Dictionary of Occupational Titles (DOT, 1991, 4th edition) published by the US Department of Labor.

	Percentage of Duty
Never	0 %
Rare	0-1 %
Infrequent	2-5 %
Occasional	6-33 %
Frequent	34-66 %
Constant	67-100 %

STRENGTH	
Strength Category	Weight Handled
1. Limited	Up to 5 kg.
2. Light	5 kg. to 10 kg.
3. Medium	10 kg. to 20 kg.
4. Heavy	>20 kg

Table 2: Essential Duty 2 – Start-up and Breakfast Preparation

a. Physical Demands		Frequency During Duty 2					Weight		Comments	
		Never	Rare	Infrequent	Occasional	Frequent	Constant	Usual (kg)		Max (kg)
Strength	Lifting – Floor to Knuckle			✓				9	12	Bus pan of potatoes (~9-12 kg)
	Lifting – Knuckle to Waist			✓				12	20	Dirty dishes (~12 kg); load water cooler onto cart (~15-20 kg)
	Lifting – Over Shoulder	✓								
	Carrying – with Handles	✓								
	Carrying – without Handles	✓								
	Pushing – Upper Extremity	✓								
	Pushing – Hips/Legs assist			✓				<1	<1	Cart with potatoes
	Pulling – Upper Extremity	✓								
	Pulling – Hip/Leg Assist			✓				<1	<1	Cart with potatoes
Mobility	Reach - Shoulder or Above			✓				Reaching for items overhead (green onions, spices, seasoning, garlic); reach for empty dish racks / function boards; reach for handle on dishwasher		
	Reach - Below Shoulder						✓			
	Handling						✓			
	Fine finger movements					✓		Seasoning; teaspoons; buttons; controls on equipment, steam table, food processor, mixer, meat slicer, hot chocolate and coffee machines		
	Neck - Static Flexion				✓			Preparing food		
	Neck – Static Neutral	✓								
	Neck – Static Extension	✓								
	Neck – Rotation						✓			
	Throwing	✓								
	Sitting			✓				Review log book		
	Standing					✓		Anti-fatigue matting at dishwashing area		
	Walking					✓				
	Running/Jumping	✓								
	Climbing	✓								
	Bending/Stooping				✓					
	Crouching	✓								
	Kneeling	✓								
	Crawling	✓								
Twisting				✓			To retrieve items in cooler / fridge / storage			
Balancing		✓					Using 2-step ladder			
Travelling	✓									

Frequency Rating Definition for % of Duty

The definitions for frequency ratings are contained at the end of the Table (page 15).

Table 2: Essential Duty 2 – Start-up and Breakfast Preparation (continued)

a. Physical Demands (continued)		Frequency During Duty						Comments
		N	R	I	O	F	C	
Sensory / Perception	Hear/Conversations						✓	Patrons, co-workers
	Hear/Other Sounds						✓	
	Vision/Far						✓	To see safety hazards (e.g. unbalanced pots on high shelves)
	Vision/Near						✓	
	Vision/Colour						✓	
	Vision/Depth						✓	
	Perception/Spatial						✓	
	Perception/Form						✓	
	Feeling						✓	
	Speech						✓	Patrons, co-workers
Work Environment	Inside Work						✓	
	Outside Work	✓						
	Slippery	✓						
	Congested worksite	✓						
	Chemical Irritants	✓						
	Confined Space Entry	✓						
	Vapour Fumes	✓						
	Noise						✓	Traffic noise (sirens)
	Proximity to moving objects	✓						
	Hazardous Machines						✓	Mixer, meat slicer
	Electrical hazard			✓				Kitchen equipment, outlets
	Hazardous objects			✓				Knives in kitchen area
	Radiant/Thermal Energy						✓	
	Hot/Cold						✓	Constant during inclement weather
	Humid						✓	Constant during inclement weather
	Environmental Dust	✓						
	Organic Substances	✓						
	Medical Waste	✓						
	Blood Products	✓						
	Lighting – Direct						✓	Natural light outdoors
Lighting – Indirect						✓		
Vibration – Whole Body	✓							
Vibration – Hand/Arm	✓							

Table 2: Essential Duty 2 – Start-up and Breakfast Preparation (continued)

b. Cognitive and Psychosocial Demands	Frequency During Duty 2			Comments
	Never / Rare	Infrequent / Occasional	Frequent / Constant	
Degree of Supervision		✓		
Time Pressure			✓	
Attention to Detail			✓	
Memory Requirements			✓	
Interact with co-workers			✓	
Interact with public			✓	
Work Alone			✓	Work alone or with volunteers
Reading		✓		Log, function forms on kitchen wall, recipes
Writing		✓		Notes for other staff, note temperature of equipment
Irregular Hours	✓			If need to come early to prepare food for early morning event
Operating Equipment			✓	Mixer, conventional oven, meat slicer, beater, food processor, dishwasher

Frequency Rating Definitions for % of Duty

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	Percentage of Duty
Never	0 %
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STRENGTH	
Strength Category	Weight Handled
1. Limited	Up to 5 kg.
2. Light	5 kg. to 10 kg.
3. Medium	10 kg. to 20 kg.
4. Heavy	>20 kg

Appendix A Essential Duty Illustrations

Essential Duty 1: Prepare and Cook Meals



Walk-in storage (items stored at 0-90" ht.)



Walk-in cooler



Walk-in freezer



Storage for cooking pans



Storage for bus pans (ht. 76")



Storage of salad spinner (ht. 78")



Reaching for blender (horizontal reach 32")



Reaching for lids and containers (ht. 62-77")



One-handed lifting of pails



2-step ladder (step hts. 10", 20")



3-level cart (handle ht. – 38",
shelf hts. – 7", 20.5", 33")



Cases with handles



Case of potatoes and bags of onions



Rolling rack for transporting food
for volunteer dinner



Coffee Cambro for volunteer
dinner



Mop bucket for cleaning spills



Robo Coupe food processor (wt. 5 kg)



Stirring posture (steam kettle)



Cleaning steam kettle by tipping



Cleaning steam kettle by scooping out with pail



Reaching for serving spoons, whisks, tongs (ht. 72")

Essential Duty 2: Start-up and Breakfast Preparation



Food preparation table



Function forms above sink



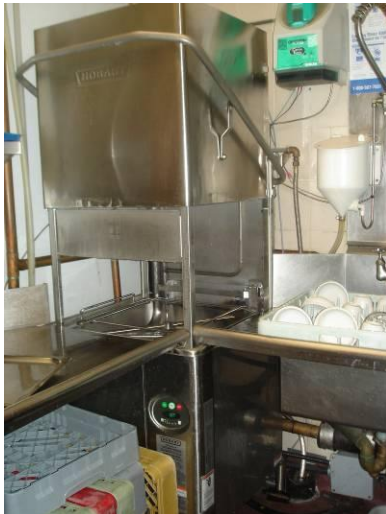
Water cooler storage



Load two water coolers onto cart
(~15-20 kg each)



Storage of bus pans etc.



Dishwasher



Storage of dish racks overhead



Storage of dish racks at floor level