

# EXTENSION EDUCATOR



## Cowlitz County

WASHINGTON STATE UNIVERSITY  
EXTENSION

### COWLITZ COUNTY

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**WSU Extension**

**Cowlitz County**

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### How to Get BIG Profits from Small Changes

Time for Spring Cleaning- including for our businesses.

Does your business need some cleaning?

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### Mark Your Calendars

**"Person in Charge" 9/15/2018**

**"Person in Charge" 11/8/2018**

### How to fuel active kids for sports & play

Want to help your children with choosing the right fuel for each sport/ activity there are in? Check out the easy go to guide with all the details you need to know.

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### HAVE A FOOD SAFE SUMMER

While the warmer weather conditions may be ideal for outdoor picnic and barbecues, the summer months typically see a spike in reports of foodborne illness.

Are you cooking correctly?

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### Bug Bytes: Crop Rotation for the home Garden

Did you know planting in the same beds could be a harmful thing to your plants. There are three reasons why disease, insect pests and soil fertility.

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### Watering Correctly Saves Time, Money and Plants

Hot, dry weather affects plants differently. Don't water on hot, windy afternoons. Early morning watering lets the water soak into the soil.

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## How to Get BIG Profits from Small Changes

Time for Spring cleaning – including for our businesses. What if we used the changing of the seasons to change our approach to get some impressive impacts?

There has always been a debate about what approach to use to improve profit/process in business. One school of thought is to select the area/product/service with the highest potential for cost reduction; sales improvement; price increase and leap head first into that area. This becomes an opportunity to rally the organization around a focused effort and thus seems simple and aligning.

A competing approach is to work more broadly at making incremental improvements across multiple lines of activity (sales, costs, overhead, margins, profits) to create smaller, sustainable improvements and process changes.

Because the highly focused 'all hands on deck' approach is so dependent on your specific situation and goals I won't attempt to address or depict it here – rather, I will show a simple example of what an incremental approach might do for your business. Please keep in mind that these actions are not mutually exclusive; your employees could be confused in implementation.

So, what I suggest is to start with a simple set of goals:



- Increase prices 1%
- Increase volume sold 1%
- Reduce direct costs 1%
- Reduce overhead costs 1%

Don't laugh! Business owners look at me like I've just grown 3 heads - how could changing ANYTHING ONLY 1% make any meaningful improvement in my business' profitability?

Despite the fact these goals seem ridiculously easy, how many businesses have actually implemented even one of them? Have YOU taken any of these actions in your business?

What if you actually focused on doing them **all simultaneously**?

Well, here is an example of what just a 1%+1%-1%-1% program of profit improvement steps can achieve:



## How to Get BIG Profits from Small Changes

### +1+1-1-1=45 Profit improvement calculator

1 Your Figures			Ratio	per \$100
	Sales	250000		100.0
	Cost of Sales	175000	0.7	70.0
	Gross Profit	75000		30.0
	Total Overheads	62500	0.25	25.0
	Net Profit	12500		5.0

2 What If		% change		
	Increase Price	1.0%		
	Increase Volume	1.0%		
	Reduce Direct Costs	1.0%		
	Reduce Overheads	1.0%		

3 Your New results - (all other things being equal)				
	Sales	255000		100.0
	Cost of Sales	175000	0.686	68.6
	Gross Profit	80000		31.4
	Total Overheads	61875	0.243	24.3
	Net Profit	18125		7.1
	<b>Increase in profit</b>	<b>5625</b>	<b>45%</b>	

#### Calculations

Sales	Original	250000		
	Price Increase	2500		
	Volume Increase	2500		
			255000	
Direct Costs	Original	175000		
	Reduction in cost	-1750.00		
	Volume Increase	1750.00		
			175000	
Overheads	Original	62500		
	Reduction in cost	-625		
			61875	

## How to Get BIG Profits from Small Changes

As you can see in this example, the results can be much more meaningful than you might imagine. The way the combination of small improvements works is similar to the concept of compound interest.

No matter your industry or market, the math works the same way. Try it...you will become a fan!

Go ahead and do the calculations with your own figures for your own business. This is powerful and easy to implement TODAY!

For planning purposes, just take your most recent quarterly financial results and see what they would have looked like if you had implemented the 1+1-1-1 approach. What would your  $1+1-1-1 = ??$  10%/15%/22%/45%?? More?

If you want help looking at your own situation drop me an email and we will schedule time to review your own situation and develop some projections and a plan.

Enjoy a happy, profitable Spring!



This article was prepared by Jerry Petrick, Certified Business Advisor, MBA, with the Small Business Development Center (SBDC) in Longview, WA. Jerry provides no-cost, confidential business advisory services by appointment. He can be reached via email [jerry.petrick@wsbdc.org](mailto:jerry.petrick@wsbdc.org)



## How to fuel active kids for sports & play



Sport Situation	Before a big game, practice, or activity
Sports & Activity Example	Football, soccer, swimming, hockey, basketball, volleyball, lacrosse, baseball, softball
When to Drink & Eat	2 hours before
What to Eat	A meal that contains complex carbohydrates, protein, and a small amount of fat such as: • turkey OR egg salad sandwich on whole grain bread with lettuce, tomato slices, thin slice of cheese, a dab of light mayo; apple slices • baked potato OR 2 corn tortillas topped with beans, salsa, and a sprinkle of grated cheddar cheese; kiwi slices • grilled chicken OR fish, brown rice and small green salad with low-fat dressing
What to Drink	8 ounces low-fat milk or fortified soy beverage AND at least 8-12 oz. of water
Go Easy On	Empty calorie foods such as candy, chocolate, cookies, sweetened drinks, and fried chips. Fat and sugar will weigh you down and leave you feeling sluggish just when you need energy to play your game.

Sport Situation	At the game/activity
Sports & Activity Example	Football, soccer, swimming, hockey, basketball, volleyball, lacrosse, baseball
When to Drink & Eat	At break periods or halftime
What to Eat	Orange wedges, melon cubes, fruit slices or grapes
What to Drink	Plenty of Water -Drink at least A cup of water every 15-30 minutes.
Go Easy On	All foods except fruit to avoid an upset stomach

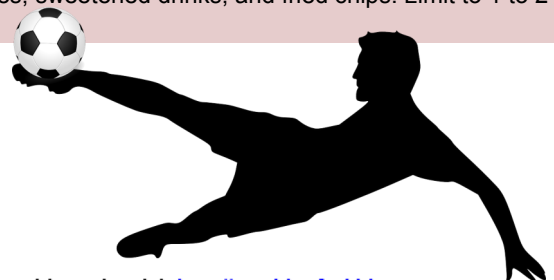
Sport Situation	At an all day event or tournament
Sports & Activity Example	Gymnastics meet, soccer tournament, volleyball tournament, swim meet, track meet, ice skating competition
When to Drink & Eat	Eat a healthy breakfast and then eat at breaks between your events
What to Eat	Light snacks such as: • a few whole grain crackers spread with peanut, sunflower seed or almond butter; baby carrots • 1 serving Greek yogurt; small banana • half of a tuna sandwich on whole grain bread; grapes
What to Drink	Plenty of Water -Drink at least A cup of water every 15-30 minutes.
Go Easy On	Heavy, fatty empty calorie foods that will weigh you down and upset your stomach



## How to fuel active kids for sports & play



Sport Situation	An activity or game on a really hot day
Sports & Activity Example	Running or playing soccer in the hot sun for more than 90 minutes at a time
When to Drink & Eat	Drink every 20 minutes
What to Eat	Orange wedges, melon cubes, fruit slices or grapes
What to Drink	Lots of Water! Drink at least A cup of water every 15 minutes, AND Drink 8 oz. (250 ml) of a sports beverage once every hour.
Go Easy On	Heavy, fatty empty calorie foods that will weigh you down and upset your stomach
Sport Situation	After the big game/activity
Sports & Activity Example	All sports and activities!
When to Drink & Eat	Your body “fuels back up” the best if you eat within 30 minutes to 1 hour after your game.
What to Eat	In order to refuel your body, eat a balanced meal that has plenty of carbohydrates. A meal of whole grain pasta, meat sauce, salad and milk will do the trick!
What to Drink	Drink plenty of water and a glass of milk to rehydrate your body.
Go Easy On	Empty calorie foods such as candy, chocolate, cookies, sweetened drinks, and fried chips. Limit to one serving of dessert or another treat.
Sport Situation	Everyday diet for young athlete “in training”
Sports & Activity Example	All sports and activities!
When to Drink & Eat	Every day, eat at least 3 meals and 1 to 2 snacks
What to Eat	A balance of foods from all five food groups - Visit <a href="http://www.choosemyplate.gov">www.choosemyplate.gov</a> for an individualized daily food plan.
What to Drink	Milk or fortified soy beverage and lots of water
Go Easy On	Empty calorie foods such as candy, chocolate, cookies, sweetened drinks, and fried chips. Limit to 1 to 2 servings on most days.



# HAVE A FOOD SAFE SUMMER

While the warmer weather conditions may be ideal for outdoor picnics and barbecues, the summer months typically see a spike in reports of foodborne illness. Make sure your fun in the sun doesn't get cut short by following some simple summer entertaining tips:

## 1 in 6

Approximate number of Americans stricken with food poisoning each year



## 128,000

Estimated annual hospitalizations from foodborne illnesses



### Did You Know?

U.S. beef sales are highest during the week of July 4th, when Americans are expected to buy about **\$400 MILLION WORTH OF IT—25% MORE THAN AN AVERAGE WEEK** (according to the National Cattlemen's Beef Association).



## Basic Tips

### CLEAN



**CLEAN SURFACES, UTENSILS AND HANDS WITH SOAP AND WATER.** If you're at a picnic, bring moist towelettes to use!



Wash all produce under plain running water before eating, cutting or cooking, even if you plan to peel them!

### SEPARATE



### SEPARATE PLATES AND UTENSILS.

When grilling, use separate plates and utensils for raw and cooked meat and poultry and ready-to-eat foods (like raw vegetables).

### COOK



### USE A FOOD THERMOMETER.

**Burgers: 160°F**



Just because your burger is brown, not pink, doesn't mean it's safe to eat!

### CHILL



### CHILL RAW AND PREPARED FOODS PROMPTLY

if not consuming after cooking.



Don't leave food at room temperature for longer than two hours (or 1 hour if it's above 90°F). If planning a picnic, perishable food should be kept in an insulated cooler packed with ice or ice packs.

## What Are You Making?

Here are some food safety tips for preparing a few signature summer dishes.

### BARBECUE

Cook all meat and poultry to recommended internal temperatures.

**Burgers: 160°F.**

**Chicken and Turkey: 165°F.**

**Sausage: 160°F.**

**Steaks: 145°F**  
with a 3-minute rest time.

### FRUIT SALAD

Rinse all produce before peeling or chopping.



Chop all produce with clean knives on cutting boards not used with raw meat to avoid cross-contamination.

### DEVILED EGGS

Refrigerate prepared eggs until they're ready to be served and once out, keep them nestled in ice to keep them cool.



ADDITIONAL  
SOURCE  
CDC



For more summer food safety tips, go to  
**—FoodSafety.gov—**

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## Bug Bytes: Crop Rotation for the home Garden

	Bed 1	Bed 2	Bed 3	Bed 4
Year 1	Legumes	Leafy	Fruits	ROOTS
Year 2	Leafy	Fruits	ROOTS	Legumes
Year 3	Fruits	ROOTS	Legumes	Leafy
Year 4	ROOTS	Legumes	Leafy	Fruits

Before you plant your vegetable garden this year, consider NOT planting your plants in the same beds they were in last year. There are three reasons to do this:

**1. DISEASE:** Plants that belong to the same families are all prone to the same diseases. For example, Verticillium Wilt is a common Washington soil-borne diseases that will infect your tomatoes and peppers year after year. We have heard some horror stories of gardeners who have lost all of their tomato and pepper plants within a couple of weeks to a soil-borne fungus.

Here are example of popular garden vegetable families:

- ⇒ Solinaceae (tomatoes, peppers, eggplants),
- ⇒ Brassicaceae (broccoli, kale Brussel sprouts, cauliflower),
- ⇒ Curcubits (squash, cucumber, melons),
- ⇒ Root crops
- ⇒ Leafy green vegetables



**2. INSECT PESTS:** Plants from the same families are also prone to attract the same pests. Crop rotation will help keep the pest population from exploding

**3. SOIL FERTILITY:** You can help manage your soil's fertility, too, by rotating crops. Each type of plant needs specific nutrients from the soil, and the planting the same crop in the same place year after year can deplete those nutrients. Rotating crops prevent this depletion and help the soil to recover nutrients. Also, planting Legumes (beans and peas) will fix nitrogen in the soil, creating a more fertile environment.

There are many different systems of crop rotation, ranging from simple, such as the one presented here, to very complex. If you have a small garden or use raised beds, it's easy to rotate your crops every couple years. Just keep accurate records each year to help you determine where you will plant the following year. If you have a very large garden, it's suggested that you rotate crops every 5-7 years.



## Watering Correctly Saves Time, Money and Plants

**By Don Tapio, WSU Agronomist**

Our extended cool, wet spring can easily deceive us into thinking that our garden soils are holding enough water to sustain our plants. In our coastal area, it may be gray and drippy for days, but the rainfall totals are usually not significant enough to replenish soil moisture. Even though our heavy clay soils may feel damp, they still may not have enough water to supply plant needs.

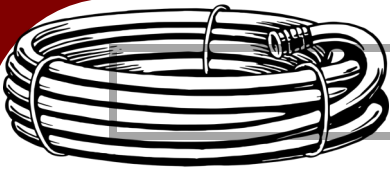
Hot, dry weather affects plants differently. Some plants wilt. Wilt results when water loss from the leaves is greater than uptake by the roots. It's easy to diagnose wilting in flowers and many vegetables. Their leaves collapse, droop and don't appear turgid or stiff. Blossoms fade and die soon after opening. Tomatoes and corn exhibit symptoms seldom seen in other vegetables. Tomato leaves roll under, while corn leaves roll up. Many garden crops abort their flowers if the weather is too hot and dry. Tomatoes, peppers, squashes, eggplants, melons and pumpkins are notorious for this condition.

Established trees and shrubs are less likely to show wilt symptoms. Instead, trees and shrubs exhibit characteristics classified as scorch. Scorch shows up as browning of leaf margins and the tissue between the veins. Leaves feel crisp or leathery. The contrast between the normal green color and brown of scorch is obvious.

One of the best methods for telling if plants have enough water is to use the "screw driver test". Simply press the screwdriver into the soil. It will easily penetrate moist soil but stops when it is hard and dry. Since the top layer of soil will dry out faster than the rest of the soil profile, make sure you sample soil at a depth of between 4-8 inches, or below this depth if you are concerned with deep moisture. With so much variation among water systems and the amount of water distributed by sprinklers and soaker hoses, it's impossible to specify exactly how long a sprinkler should be left on in order to replenish soil moisture to a particular depth. This is best determined by leaving the sprinkler on for a specified period of time and then measuring the depth of soil moisture.

Trees and shrubs should be watered to a depth of 18-20 inches. The amount of water to apply in any situation will depend on the soil type. Sandy soils absorb water faster (about 2 inches per hour), followed by loam soils (3/4 inch per hour). Clay soils have the slowest absorption rate (1/2 inch per hour). By allowing water to penetrate deeper into the soil profile you are encouraging deeper rooting and a more drought tolerant plant. Frequent, light irrigations will lead to plants that have a shallow root system and are more prone to water stress.





## Watering Correctly Saves Time, Money and Plants

Fortunately, lawns are equipped for hot, dry conditions. Instead of wilting and dying like many plants, they simply go dormant. Like a hibernating bear, a dormant lawn does not need food or water. When conditions are more ideal, usually in September, the grass will awaken and turn green. A newly established lawn may need to be watered throughout the summer to reduce drought stress and to prevent the plants from actually dying. Lawns with a thick thatch layer are also more prone to dying and thus may need watering.

Don't water on hot, windy afternoons. You'll lose more than half of your water to evaporation. Early morning watering lets the water soak into the soil. It also allows the plant foliage to dry off fast once the sun rises which helps prevent plant diseases. Remember that anything planted this year and any trees or shrubs planted over the last two years need extra water. Even plants listed as drought tolerant will need extra water if newly planted. Vegetables and fruit plantings need water, especially during fruiting. In addition, plants in containers will need to be watered more often, perhaps daily, depending on temperature and wind.

Finally, don't forget to mulch. Mulching helps keep the soil cool and moist while suppressing water-stealing weeds. Apply 2 to 4 inches of wood chips, straw or other mulching material to garden and landscape plants. Applying more than 4 inches of mulch may deprive roots of oxygen. Excessive mulch can also make it hard for any water to reach the roots.

