

# **CSU Specialty Crops Marketing Research Update**

## **Southern Rocky Mountain Agricultural Conference, 2011**

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### **Acknowledgements**

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## Outline

- Motivation
- Background Statistics
- Timeline of Activities
- Sensory Analysis Overview
  - Cross-sectional comparison
- Experiments Overview
- Summary Findings
- Next Research Steps



## Motivation



- Colorado potato producers raise over 100 cultivars annually in their certified seed and commercial crops
- Many newer cultivars believed to have improved **health benefits**, **flavor**, and **physical characteristics**
- Perception that consumers are generally unaware of these positive attributes
- Development and promotion of a “branded” potato that is unique to Colorado thought to help **increase sales** and enhance the **long-term sustainability** of Colorado’s potato industry.

## Marketplace Background-Consumption

- In-Home Potato Market (NPD): Topline. (2010) pp. 1-34
  - Annual in-home potato eatings continues to fall
  - “Specialty potatoes” annual eatings per capita remained constant from 2008-2009, and remained second only to mashed potatoes in total annual eatings

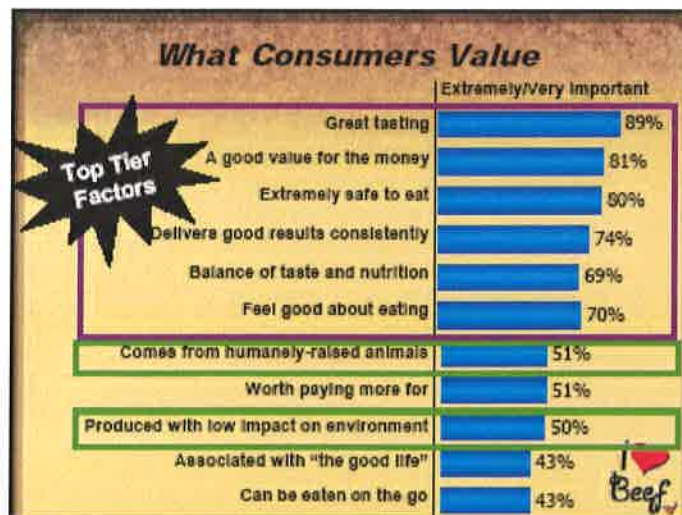
## Annual Eatings Per Capital by Potato Type

Annual Eatings Per Capita by Potato Type			
	2008	2009	Difference
Mashed	18	16	-2
Specialty	14	14	0
Baked	12	12	0
French Fries	12	10	-2
Other Fried	3	4	+1
Boiled / Steamed	2	2	0

## Marketplace Background-Consumption

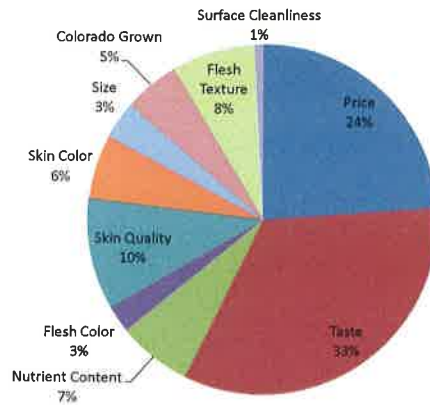
- USPB Potato Attitudes and Usage 2010. (2011) pp. 1-34
  - Consumers preparing/eating dinner at home more often
  - Potatoes behaving as a “normal” good in this context
- **Health perceptions continue to slowly improve**
  - Net change in agreement across health-related statements is up 3.8% points in 2010
  - Fewer people actively avoiding potatoes
- However, “health is still the biggest challenge for potatoes”
  - Awareness of specific health benefits still low
    - Only 44% of the sample strongly agreeing that potatoes are a good source of potassium and vitamin C

## Beef Industry Consumer Value Study



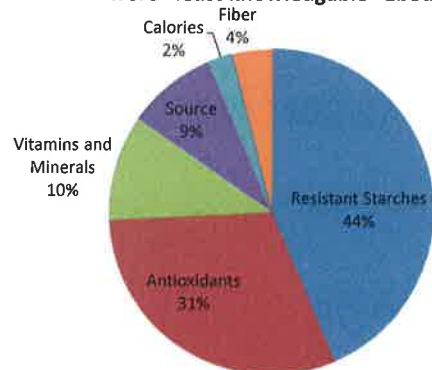
## CSU Specialty Potato Study

### Attributes Identified as "Most Important"



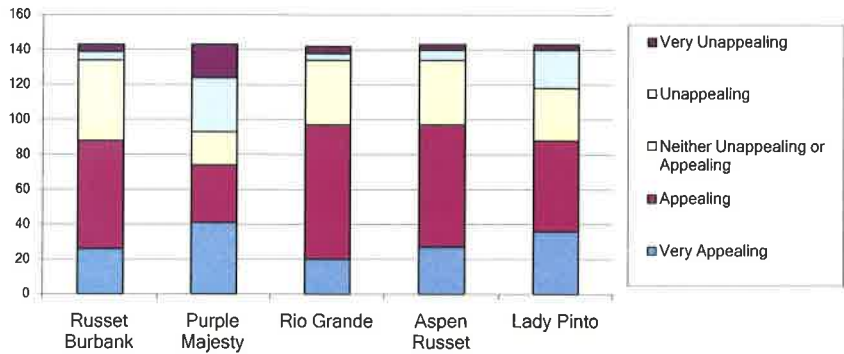
## CSU Specialty Potato Study

### Subjects which respondents were "least knowledgeable" about



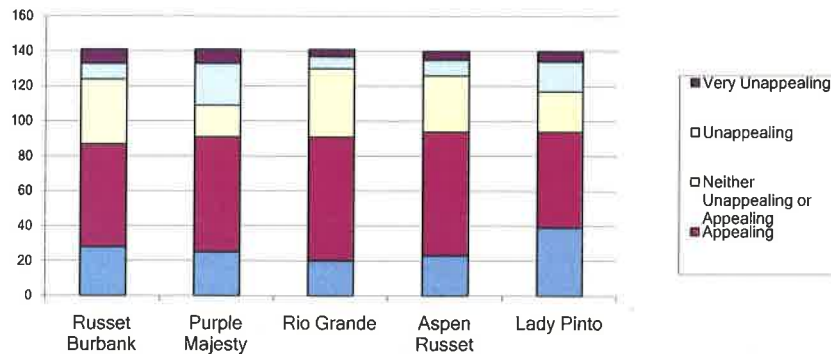
## CSU Specialty Potato Study

After viewing the whole uncooked potatoes, please rate the potatoes in terms EXTERNAL VISUAL APPEAL.



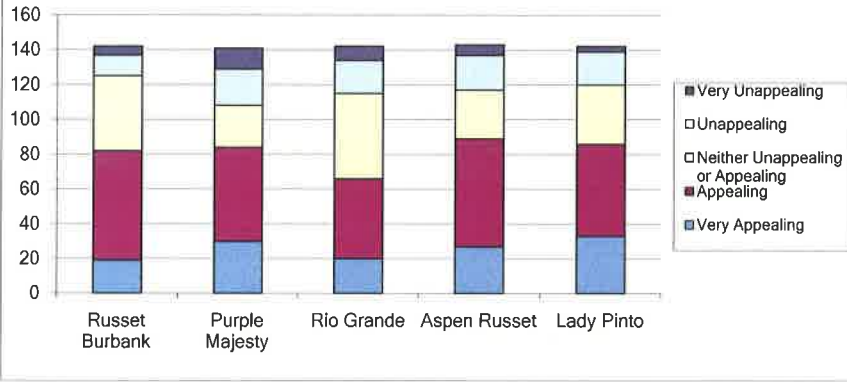
## CSU Specialty Potato Study

OVERALL APPEAL (Microwave):  
Rating by Variety



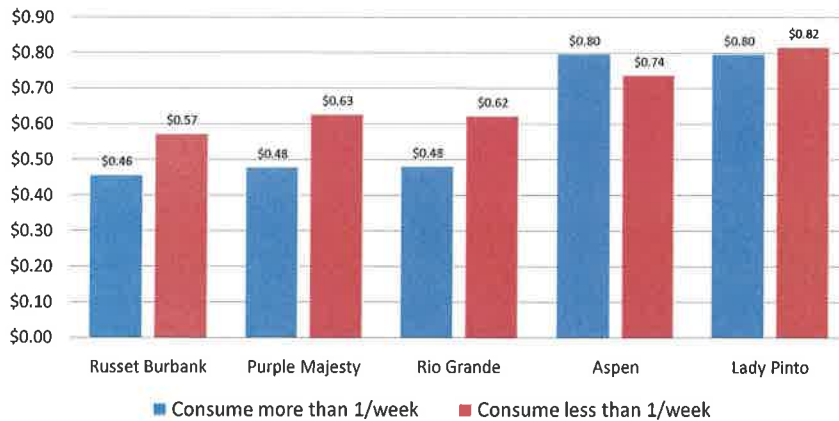
## CSU Specialty Potato Study

Overall Appeal (Oven):  
Rating by Potato Variety



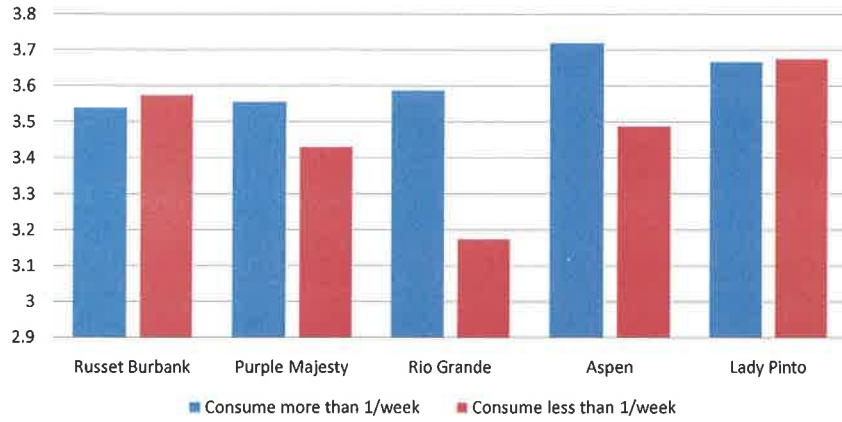
## CSU Specialty Potato Study

Average Final Bids (Per Pound) by Consumption

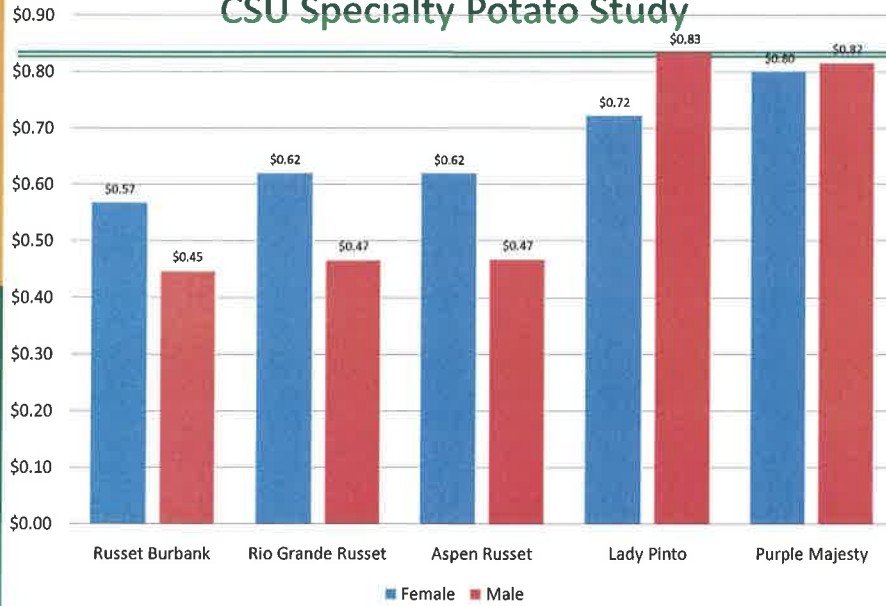


## CSU Specialty Potato Study

Average Ratings by Consumption (on a 5 point scale)



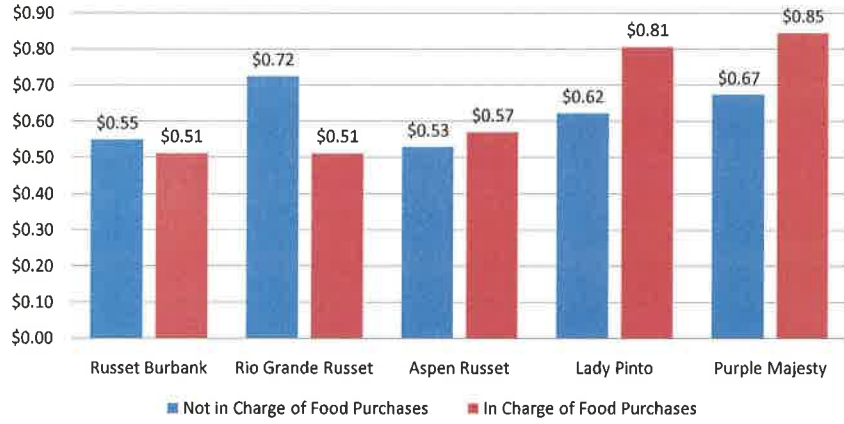
Average Bid Amounts (Per Pound) by Gender  
CSU Specialty Potato Study





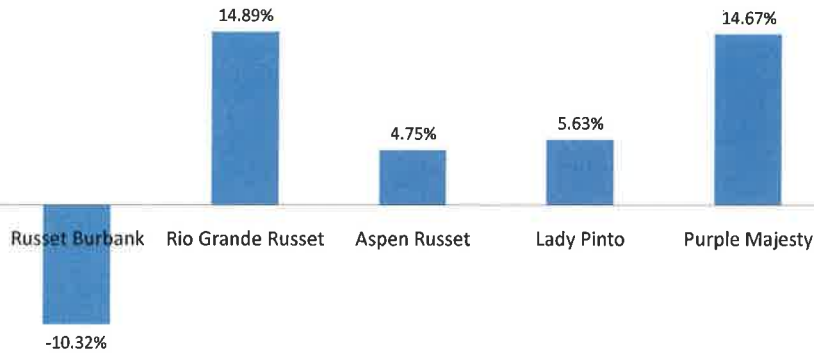
## CSU Specialty Potato Study

Average Bid Amounts (Per Pound) by Primary Grocery Shopper



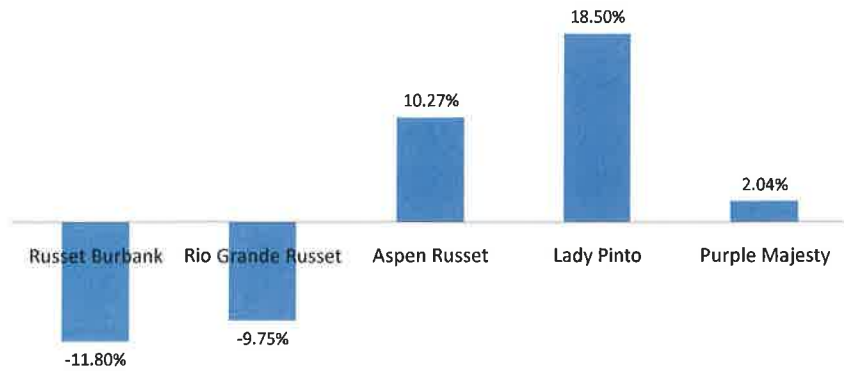
## CSU Specialty Potato Study

Percent Change From Sensory to Nutrition



## CSU Specialty Potato Study

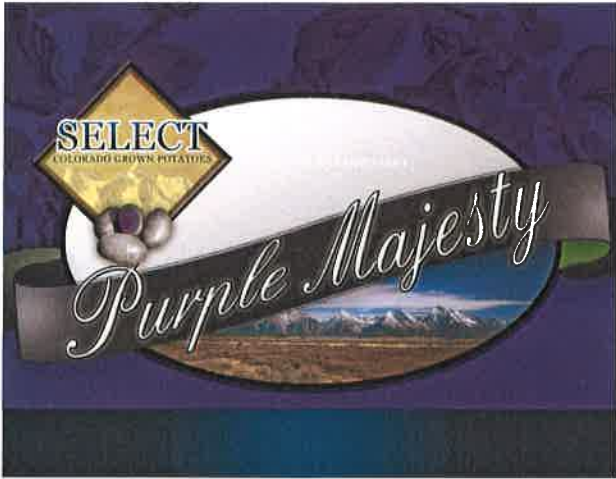
Percent Change from Nutrition to Sensory



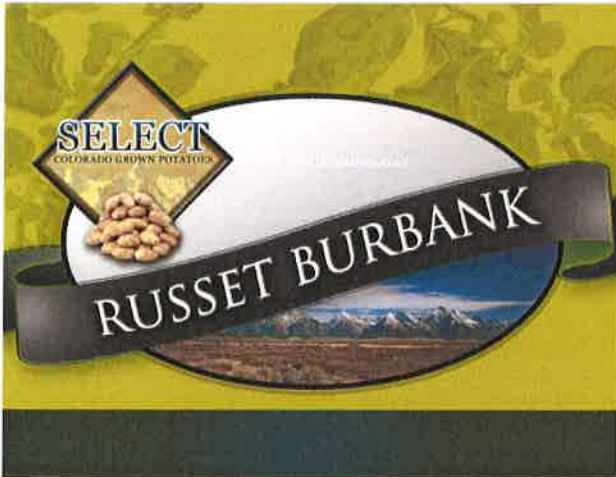
## Domestic Outlook-USPB's Tim O'Connor

“Are you communicating to consumers about nutrition? You’ve got a vehicle. You’ve got packaging. Just say something to customers about nutrition.”

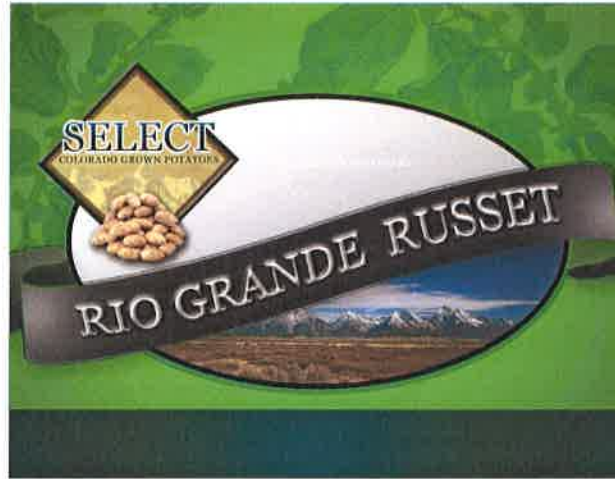
CSU Specialty Potato Study



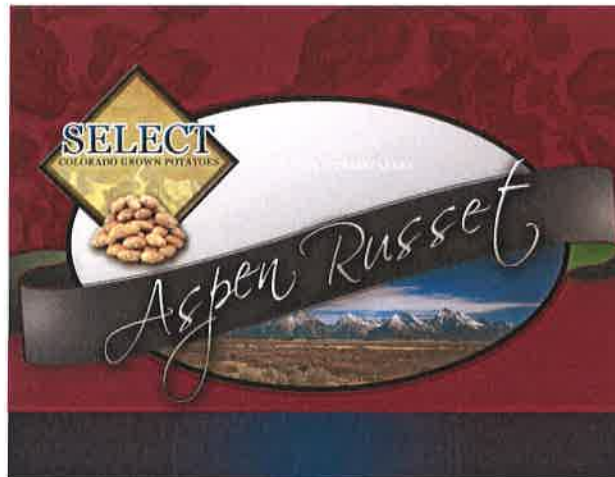
CSU Specialty Potato Study



## CSU Specialty Potato Study



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## CSU Specialty Potato Study

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## Specialty Potatoes: Supply Side Issues

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- Hang-ups in supply chain likely responsible for not encouraging greater plantings of specialty potatoes (Knutson)
  - No/little secondary mkt, thinner primary mkt
  - Difficulty in finding market partners
  - Uneven response from retailers
  - “It is more risky to grow specialty potatoes than commodity varieties.”

## Next Steps

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- Further Data Analysis and Cleaning
- Preparation of Summary Report (March)
- Outreach Publication
- In-Store Trials and Data Collection
- Data Analysis
- Marketing Recommendation

Thank You!



Questions?

## Bond Update:

### Choice Set Survey and Consumer Experiments:

In summer and fall of 2010, our primary focus was the facilitation of the various sensory analyses and consumer experiments. The first set of sensory and demand analysis trials took place in July. These sessions evaluated consumer preferences for oven-baked and microwaved varieties of 5 potatoes. Both a trained panel and in-home trials were conducted as part of this first set of evaluations.

Consumer experiments took place in October and November of 2010 and began with the drafting of the experimental protocols, obtaining approval from Human Subjects at CSU, soliciting participants, finalizing protocols, and recruiting assistant facilitators. Drs. Kroll and Craig Bond of the Agricultural and Resource Economics Department at Colorado State University assisted with all experiment tasks.

The actual experiments consisted of a pre-screening survey, a consumer demand survey and analysis of willingness to pay for various combinations of label claims and product attributes, followed by practice auctions, actual potato auctions, and sensory evaluation using five potato varieties that were presented in both baked and microwaved form. A significant amount of data was generated from this process.

Experiments took approximately 1.5-2+ hours to complete per session and over 140 volunteers from the community participated in the experiments as well as three faculty and a team of four graduate students. The experiments were held in an approved testing and kitchen facility located in the Food Science and Human Nutrition Department in the Gifford Building on the Colorado State University campus.

Following the completion of multiple rounds of sampling, Masters' students Danny Iverson and Eric Larson coded and uploaded data to a statistical package and began the process of drafting summary analysis of the survey and sensory information.

Sections of the top-line statistical analysis were presented at the Potato Expo in Las Vegas in January. Additional findings were prepared for the Southeastern Colorado Agricultural Conference in February. Research abstracts were submitted to the Western Agricultural Economics Association for consideration for inclusion in the summer meeting schedule. Two abstracts were accepted and econometric analysis associated with these abstracts will be presented in late June in Banff, Canada. Cross-sectional summary analyses and results from the econometric investigations will be included in planned and upcoming outreach presentations and publications.

### Secondary Data Review

Graduate students Danny Iverson and new team member, Chris Huber, have assisted to conduct a review of existing potato demand data. Resulting from their analysis of USPB-provided scanner data and additional data searchers, are a series of one fact sheet and two research papers. Chris Huber is conducting a multi-metro area specialty potato demand analysis to conclude in summer of 2011. Summary statistics and findings from the secondary data review have been incorporated into various presentations, abstracts, and other team outputs.

### Graphics Design:

Following a period of review and discussion, Alysce Christian presented her final label mock-up to the research team group. The comments of multiple parties were very helpful to her and are reflected in the final designs. The labels are appropriate for use on both poly-bags and clam-shell type packaging. Following review of consumer response to various label claims, final label mock-ups will be made and applied to poly bags to be presented to attendees of the September 10<sup>th</sup> Potato Fest in Monte Vista, Colorado.

### Outlook:

Following a period of significant data collection, the marketing team will continue to analysis collected information and develop both outreach and academic-targeted research outputs. Several presentations are planned for the coming months at both academic conferences and extension field days. In the coming months we will also be transitioning to the next phase of the project. Activities will include production of potato packaging, website development, research coordination, and preparation for in-store sales of branded specialty potato products.









Russet Burbank

Russet Burbank

COP9033180

Russet Burbank

Purple Majesty

\$5.98

DOLLAR TREE  
TOTAL \$5.98  
01/24/2024  
DL 94263794 8

- 2.) Pricker your eyes to 20 drops.
- 3.) Remove all potatoes from their plastic packaging and allow to rest for 24 hours in a well-lit room.
- 4.) Complete Question 1 on both parts of the green security packet. Do this before we collect the potatoes have been fully cooked.
- 5.) Prepare the potatoes for cooking by peeling and paring with care. An average potato will weigh 150g. They may have appeared in the process that it is possible to have a potato that is slightly smaller or larger than the other potatoes.
- 6.) Follow the instructions below for potato preparation.

**Preparation Instructions**

1. Take an even sack or cookie sheet for 15 minutes. To use for 15 minutes, repeat with an even sack or cookie sheet for 15 minutes. This means you should repeat this process also about 15 minutes. They will naturally cook slightly faster than the other potatoes.