## What I Learned Studying Chocolate Presentation to the Davis Rotary Club

Thank you.... I appreciate the invitation to speak with you today. After Lou invited me to make a presentation I checked my notes and recall that I spoke to the Davis Rotary on February 24th back in 1992 – that topic was prospects for peace in the Middle East – well we can all see how far that has progressed through the years ... Although my presentation will focus on topics related to chocolate – I also have another agenda that I hope will strike a chord for another issue – the loss of historical perspective by High School and University Students – not only at UC Davis but elsewhere in the United States – and globally...

Years ago in my Nutrition 120 class on nutritional anthropology I used to report that the period between World War I and World War II was known as the golden age for research on vegetarianism, whereby information on non-meat diets progressed based upon laboratory and human scientific studies instead of "hunch" and "opinion." Many students appeared confused by this statement – not because of scientists looking at vegetarian issues – but because of the phrase "period between World War I and World War II... Noting this I asked my students to take out a piece of paper and write their answer to four questions: when did WWI start and end, and when did WWII start and end...

Given that American involvement in both conflicts had a different beginning date than European involvement, I qualified the questions by saying – take your choice; identify either initial American or European involvement. The students were asked to participate without threat or coercion affecting their grade. They wrote their responses on blank sheets without their name, folded their papers, and passed them to the Teaching Assistants for collection. It was impossible to match responses with specific students.

I was distressed after tallying the responses for this group of very bright, SAT smart, UC entrance qualified freshman, sophomore, junior, and senior students: they reported a range of interesting dates among them. One student claimed that World War I began in 1760 and ended in 1780; another that WWI began in 1800 and ended in 1849; The range of responses for beginning of WWI was: 1760-1940; and for the ending of WWI was 1780-1927. Approximately 20% wrote that they did not know.

Regarding the beginning and ending of WWII; one student wrote hostilities began in 1850 and ended in 1860; the range of responses for the beginning of WWII was 1850 to 1950 and the end of WWII range was 1860 to 1954, and 14% stated they did not know. Of these students 26% had the beginning of WWII approximately correct, that is within the period of 1938-1942 – and approximately 22% had WWII ending within a reasonable range of 1945-1946.

The information just presented date to 1990 – nearly 20 years ago – but not much has changed regarding lack of knowledge and interest on the part of students for history and geography. Several years ago while at Oxford colleagues told me the same thing. Last year at Ball State in Muncie, Indiana, colleagues told me the same thing about lack of

historical appreciation on the part of their students.

Nutrition 20 was not a history class. My class, however, was predicated on the belief that university students should have a sense of history, in essence a sense of place and time, upon which they could develop an appreciation of cultural diversity and ethnic practices relating to food, nutrition, and the medical consequences of human food behavior. In my classes I did not present lists of dates to be memorized or locations to be mastered, merely be located on a map or to fit some ideal about "common knowledge."

Through the years I continued to be frustrated by questions from otherwise apparently bright students who have asked me the following questions: "Why are we studying German food habits in Europe, when everybody knows that Germany is in Asia?" or "Wasn't the Berlin wall built in 1911 to keep the Germans from invading Russia?"

But students in primary and secondary school in Davis ARE being exposed to such topics, ideas, and locations – but the issue is this:the majority of students – once exposed – see little value in history, rarely retain it, and rarely appreciate the value of historical studies the information fades from memory – and upon arrival at UC Davis or other local, national, or international institutions of higher learning – students basically have forgotten their earlier lessons – because they see little value in the humanities in general, or history specifically.

This is one reason why the administration at UCD decades ago began the institution of Freshmen Seminars – small classes that focused on themes that commonly integrated aspects of the humanities, social sciences, and bio-medical sciences. I taught 15 of these Freshmen Seminars and I experienced the joy of academic growth and development of these fine students. I received a deep sense of joy from student accomplishment. I am proud to have worked with more than nine thousand students on this campus during my 32 years as a Professor at UC Davis – but I have remained troubled through the years regarding lack of student appreciation of history.

The issue, in reality, is not whether or not students know when World War I and II began and ended. If we start along that track, this leads down the road to thousands of "lists" of events and locations that concerned university professors would identify and assemble as ESSENTIAL KNOWLEDGE – and – the content of these lists would be dissimilar. But it bothers me terribly that a segment of our students think that World War II began in 1860 and ended in 1954; too many good men and women fought and died for our country to defeat the Axis forces and to defend freedom.

What constitutes – or should constitute – literacy in the arts and humanities, in the cultural-social sciences, in the biological-physical sciences? Something is missing in education today; it is ephemeral and difficult to define – but whatever it is acts like a deadly virus. Are we at the end of the "golden age of America," when a substantial portion of our youth are, in fact, oblivious to specific key events and cannot place them within a reasonable chronological or location context? Regardless of our political convictions – do we not share the same regard for our Constitution and Bill of Rights? Do we not share concerns over the global issues of the day; do we not share similar concerns

that our democracy and freedoms are under attack – by forces from within and without our nation?

This background brings me to my topic today: *What I learned by studying the history of chocolate*. Chocolate history is not merely drab facts, dates, and the names of people: chocolate history reveals who we are as humans, our findings teach us about earliest forms of agriculture; expose us to magic, to the spells and incantations of traditional healers; to warfare and violence through the ages; to insights on the earliest years of our own American Revolution; to issues of personal risk, honor, and dedication to our nation.

For the past 12 years I coordinated with Howard-Yana Shapiro the chocolate history project at UC Davis. Our work finished in 2009 year after publication of our findings in this book. All together we were a group of more than 110 scholars dedicated to searching for chocolate history in more than 250 dusty archives, libraries, and museums in more than 30 countries. Every week during the research phase of our efforts, we discovered numerous examples that excited us, for the study of chocolate history, reflects who we are as humans, and chocolate can be claimed as the "blood" that flows throughout much of human history – an exciting history at that.

Chocolate has its origins in South America – more than 5,000 years ago – and then in southern Mexico...

First archaeological documentation for chocolate in North America is c. 1000 Common Era – at Chaco Canyon, New Mexico...

First historical documentation for chocolate in North America, in turn, is more than 1,500 years later during 1642 at St. Augustine, Florida...

Regarding California – Cabrillo expedition 1542 – can't be certain there was chocolate aboard his ship...

First confirmed chocolate in Baja California is 1726...

First confirmed mention of chocolate in Alta California is associated with the Portola expedition – chocolate taken along for troops 1768-1769 – mention in letters by Father Junipero Serra...

But in the Portola expedition documents prepared by Father Serra ... where history REALLY is important ... is the astonishing report of the ship, *San Carlos*, that has application today in the year 2009 ...

We discovered a letter written by Father Serra that reports a case of chocolate theft, and how a lowly Sergeant took it upon himself at great professional risk to accuse his superior of theft. It is a document that reveals astonishing personal honor and dates to 1773: when his superior, a Captain Fages, stole chocolate dedicated for the use of ill soldiers at the Presidio in San Diego; Sergeant Periuez made his complaint in a letter to Father Serra...who in turn sent the complaint with his own supporting signature, to the Governor General of New Spain – and ultimately the thieving Captain Fages was relieved of duty.

Other documents reveal that 1775 was a good year for chocolate in California...

In 1775 Ayala and Canizares explored S.F. Bay and shared chocolate with local Native Americans...

In 1775 Spanish attempt to colonize Pacific Northwest – Vancouver and Bodega – chocolate used by Spanish...

The same year is the onset of the  $2^{nd}$  de Anza expedition to California 1775-1776 – marriage in San Diego...

John Sutter established his trading camp in 1839 at the confluence of the great rivers that now flow through and past Sacramento – and would then build his fort in 1844...

After establishment of Sutter's fort, there was a sudden surge of illegal immigrants from elsewhere in the United States of America – into Spanish California. And in 1845 the United States government sent two famous persons to survey the west, and we found evidence that John Freemont and Kit Carson drank chocolate at Sutter's Fort in 1845...

We all recall that the Donner Party expedition left Missouri in 1846 – and became stranded in the western mountains during winter of 1846-1847...John Sutter sent his friend John Bidwell to procure supplies for those "stranded in the western mountains." [HERE IS A COPY OF THIS DOCUMENT FOR YOUR INSPECTION]

John Marshall discovered gold on the north fork of the American River in 1848... The California gold rush was on in 1849 and subsequent years – many diaries mention chocolate...

I close my presentation by showing a facsimile of the menu prepared in celebration of the  $2^{nd}$  Presidential inauguration of Abraham Lincoln dated March 6<sup>th</sup>, 1865 ... there is something poignant about this menu: for just 6 weeks later the President will board a carriage with his wife to attend Ford's Theater and his date with destiny ... Here is the Bill of Fare for the Inauguration Ball ... imagine all attending having a grand time – the President still locked in gloom regarding the War effort – but all dining on a range of foods that included chocolate ... and a mere 6 weeks later the president will be dead. [HERE IS A COPY OF THIS DOCUMENT FOR YUR INSPECTION]

What I learned through the study of chocolate history is legion: how the themes of archaeology, biology, comparative literature, dietetics, economics, food science, geography, law, linguistics, medicine, nutrition, psychology, sociology, and a myriad of other fields and disciplines are linked in a historical network and intertwined with cacao and its manufacture into bars, beverages, pastes, powders, and syrups – and how the history of chocolate is linked with names of greatness, and just a minimal sampling would include Napoleon Bonaparte, Hernando Cortez, Emilia Earhart, Benjamin Franklin, Thomas Jefferson, Marie Antoinette, George Washington, and thousands more;

the names of Franklin, Scott, and Shackelton and their use of chocolate in the Arctic and Antarctic regions ring out through the years; Theodore Roosevelt in his exploration of Brazilian tropical regions ordered his expedition members to eat chocolate – but only on Wednesdays; chocolate was served in First Class at dinner on board the *Titanic* on the night of April 15<sup>th</sup>, 1912; and chocolate was served aboard the Hindenburg that fateful night of May 6<sup>th</sup>, 1937, when the zeppelin crashed at Lakehurst, New Jersey.

Chocolate – because of its sleep-inhibiting properties – has been served to military American soldiers serving as sentries from the time of the American Revolution, through the War of 1812, American Civil War, Spanish-American War; and included as a pleasure-food in rations developed for WWI, WWII, Korea, and Vietnam, and of course is included in the diet of our men and women today serving our country in desert regions of Afghanistan and Iraq.

Chocolate also has been part of the food intake patterns of brave astronauts and cosmonauts from the earliest Apollo Missions to the Mir Space Station, and certainly will find a place in the future Mars Mission. Chocolate history links all these and more... chocolate history reveals what make us human.

I end today with this thought: whether or not undergraduate and graduate students at UC Davis major in the biological, medical, physical, or mathematical sciences – all should have an appreciation of history – because history is "us" – history is a reflection of who we have been, who we are now, and what we will become in the future.

Thank you....