Joseph Cannillo BS, MS, DC

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Italy
Tel. 0039 3485812357
Born JUNE 16, 1960

Manorhaven Elementary school Port Washington NY , USA
1966

Sousa Junior High School Port washington NY, USA
1972

Schriber High School Port Washington NY, USA
1978

Long Island University, CW Post Center NY , USA
BS Medical Biology / Biochemistry Cum Lauda Honors
1981

Cornell University, New York Hospital School of Cytopathology NY, USA
Cert. Cytopathology
1982

Outstanding Young Men of America Washington D.C.
1983

Long Island University, CW Post Center NY, USA
MS Molecular Genetics / Nutrition
Research Thesis : Cloning of Dihyrofolate reductase gene in E.coli / Folate Therapy
1984

White Plains General Hospital NY, USA
Head Cytothechnologist / Cytopathology PAP Test Lab
1982

Enzo Laboratories NY, USA
Developing DNA Probe for HPV on PAP Tests
Head Researcher
1985

New York Chiropractic College NY, USA
DC Doctor of Chiropractics Magna Cum Lauda Honors
1988

International Academy of Classical Homeopathy (George Vithoulkas)
Post Graduate Course NY, USA
1988

Holistic Center Bari Italy
Chiropractic / Functional Medicine Clinic
Clinic Director
1989

University of Napoli Italy
Masters course in Botany, Herbology and Gemmotherapy
1989

Post Graduate Course Bologna, Italy
Bioterapia - Oligoelementi - Litoterapia
Dr Ermanno Micucci
1990

Forza Vitale Italia srl Bari, Italy
Herbal Products Manufacturing Company
Founder
1990

Forza Vitale Research Lab / University of Bari Italy
Lab Director
2000
Research Projects:
Epigenetic Functions of Herbal Polyphenols in Cell Cultures and Drosophila Models
Diabetes
Neurodegeneration
Cancer
Novel Antibacterials

Accreditations:

GCC - General Chiropractic Council (UK)

BCA - British Chiropractic Association (UK)

AIC - Italian Chiropractic Association (Italy)

ACA - American Chiropractic Association (USA)

ECU - European Chiropractic Union (Belgium)

Teach and Hold Conferences on Phytotherapy to Medical Doctors and Naturopath in all of Italy, once a month for the last 15 yrs.
Participate with Poster sessions and Lectures at International Conferences:

NHP (Kelowna - Canada)
Natural Health Products Research Society 2012 Conference

ANMA (Las Vegas – USA)
American Naturopathic Medical Association 2012 Conference

NUCE International (Milano – ITALY)
Salone Internazionale della Nutraceutica 2012

SIROI (Roma – ITALY)
Congresso Nazionale Oli Essenziale 2013

Research Publications:

Differential Expression of Cloned Yeast Dihydrofolate Reductase Gene in Escherichia coli

Kamalendu Nath, Joseph Cannillo, Edward W. Baptist

Journal Article Annals of the New York Academy of Sciences 435(1 First Colloqu) 187-189 (1984)

Effects of *Morus alba* extract on Sucrose-Induced Insulin Resistance in *Drosophila*

Cannillo Joseph, Salerno Antonio
Forza Vitale Italia, Research Laboratory, Corato (Ba) Italy !

Abstract

Background

Drosophila has been used extensively in studies on metabolic disorders. Flies have many of the same basic metabolic functions as mammals, including the ability to maintain glucose homeostasis. Diabetes mellitus is a chronic metabolic disorder characterized by high blood glucose levels. Type 2 diabetes, defined as noninsulin-dependent diabetes mellitus (NIDDM), is the most common form of diabetes and affects 90 –

95% of all adults living with diabetes. Type 2 diabetes is a disease caused by reduced insulin production or impaired insulin response in target organs.

Mulberry root bark or leaf extracts were shown to possess hypoglycemic effects in animal models of type 2 diabetes mellitus. Mulberry leaves have potent αGI activity because they contain 1- deoxynojirimycin (DNJ), a glucose analog that inhibits α-glucosidase in the small intestine.

Results

After growing *Drosophila* L1 larvae for 6 days in either standard fly medium or standard medium supplemented with 10% sucrose, we observed a 20% increase in larval glucose levels in the 10% sucrose group when compared to the standard medium group. To test the effect of *M. alba* leaf extract on *Drosophila* larval hemolymph glucose content, a third group of larvae was fed standard medium containing 10% sucrose and 1% *M. alba* leaf extract. As we expected, consumption of *M. alba* leaf extract induced a 40% reduction in the glucose levels of the *M. alba* group when compared to the 10% sucrose group.

Conclusion

Our studies have gathered favorable evidence for the efficacy of *M. alba* extract in lowering post prandial glucose levels. Therefore, *M. alba* extract appears to be a promising therapeutic for the prevention of diabetes or to delay disease progression, especially in pre-diabetic or mildly diabetic individuals.

Enhancing antibacterial action of Origanum vulgare essential oil through a cationic nanoemulsion.

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Current methods of sanitation of food facilities have some well-known drawbacks, such as toxicity of cleaning agents residues, or promotion of resistance to these agents in enteric pathogens. Therefore, there is a strong requirement to develop alternative sanitation and disinfection methods. A particularly challenging problem in many environments, including food processing areas, is the presence of biofilms. These accumulations of inorganic and organic materials and bacteria can develop on most types of surfaces. Both pathogenic and non-pathogenic microorganisms can be incorporated into biofilms during their progressive formation. Although biofilms can become strongly attached to surfaces, parts of the biofilm can occasionally slough off to contaminate other surfaces as well as food products, when in a food processing environment. Biofilms that contain Listeria , Pseudomonas , Campylobacter , Escherichia coli or Salmonella all have been observed in food processing environments. Biofilms are highly prevalent and difficult to remove and bacteria in them have enhanced resistance to antimicrobial agents and sanitizers.
During recent years, plant essential oils have come more into the focus of phytomedicine. Especially, the antimicrobial and antioxidant activities of essential oils . The essential oil from the common herb Origanum vulgare may be an effective treatment against dangerous, and sometimes drug-resistant bacteria. Our research was centered on creating nanoemulsions that were able to enhance the antimicrobial activity of Origanum vulgare essential oil against pathogenic bacteria.
Nanoemulsions are a vehicle for the delivery of an antimicrobial agent. The physical structure of the nanoemulsion contains surfactants and solvents that have antimicrobial activity. The surfactant activity specifically disrupts pathogenic microorganisms through fusion with the membrane of the microbe, leading to the rapid lysis of the targeted organism. This mechanism of action has been

documented in preliminary studies examining the in vitro virucidal, bactericidal and sporicidal effects of these compounds. All Compounds used are classified as GRAS (Generally Recognized As Safe) by the FDA and are all compounds used in the food industry .

Methods: Cationic Nanoemulsions were prepared by making stock solutions of 100 mg/ml of Origanum vulgare essential oil. Samples of this solution was utilized as samples for serial dilutions. A macro-broth-dilution technique was used to determine the susceptibility of the bacteria to the essential oil of Origanum vulgare. The MBC was determined by subculturing a 0.01-mL volume of the medium drawn from the culture tubes after 48 h on Mueller Hinton Agar and incubated further for bacterial growth.

Conclusion: Our Research has confirmed that our Cationic Nanoemulsion of Origanum vulgare has a MBC of 7 ppm and a surface biofilm bactericidal activity time of 10 minutes.

MBC : Minimum Bactericidal Concentration
PPM : Parts Per Million
GRAS : Generally Recognized As Safe

MBC for Ampicillin	40 ppm	*Toxic
MBC for Phenol	1000 ppm	*Toxic
MBC for Monolaurin	700 ppm	**NON TOXIC GRAS**
MBC for Sodium hypochlorite	50 ppm	*Toxic
MBC for Quaternary ammonium compounds	100 ppm	*Toxic
MBC for Cationic Origanum Nanoemulsion	**7 ppm**	**NON TOXIC GRAS**